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## FRANCE TO AMERICA.



AUGUSTE BARTHOLDI.

WHAT with circulars, illustrated papers, and pictures in shop-fronts, the views of the great statue here presented, designed by the sculptor Bartholdi for New York

Harbor, will not be new. Yet it may be of interest to learn more of the sculptor; it may amuse people to hear something about the career of a man to whom an honor so

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signal has been given, and perhaps to see a picture or two of the various statues which he has already completed.

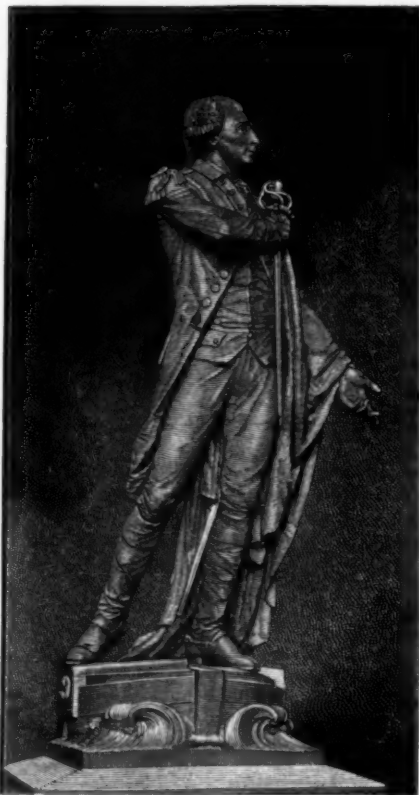
Bartholdi has been selected from the long list of artists in France, a country which at the present day stands incontestably first among Western nations in respect to art. Moreover, his work is an international one, designed to draw closer the natural bonds of sympathy between Frenchmen and Americans, and intended to remind all men of the early alliance of the two peoples, as well as the political action and reaction they have at various times exercised upon each other. It would be strange if a new and untried man should have been appointed for such a task: the present sketch may serve to show that the sculptor has already won a position by a goodly array of excellent works.

Auguste Bartholdi is from Alsacia,—a debated ground which has reared illustrious men ever since Kelts and Teutons first began there either to quarrel and kill, or to take each other in marriage, according as peace or war happened to be the order of the day. The heavy-handed Teuton, understanding the power of union and being less inclined to civil wars, has usually been the apparent victor, but the lithe Kelt has reaped the fruits of his antagonist's victory, and in the long run has so mastered the dull strength of the conqueror that the latter has generally been ready, after the lapse of a certain number of generations, to deny his own origin and ancestry for the sake of claiming that of his victims. We may presume M. Bartholdi's ancestors in the female line to have sprung from such mixed stock as this, and to have got from one race the fire, inventive talent, inspiration of the Kelt,—from the other, the endurance and patient laboriousness of the German. In the line of males, however, the descent is not from an original French ancestor, but an Italian, as the termination of the name might suggest. The original Bartholdi hailed from the north of Italy in the neighborhood of Lake Como and came to Alsacia and Colmar some two hundred years ago. Colmar is a small town which unites to a modern bloom of manufactures the agreeable flavor of antiquity to be found in a cathedral of the fourteenth century and various other old buildings. His descendants have been citizens of Colmar ever since, and have been, as a rule, clothed with some sort of authority, either spiritual or temporal. But for the most part the

Bartholdis have been preachers of the gospel. Hence the sculptor can not only claim for his immediate forebears the respectability of the cloth, but represents in himself at least three countries, namely, Italy, France and Germany. He is therefore more peculiarly fitted by descent to be the builder of a statue for America than if he were of less mixed parentage; for what are Americans but the result of a fusing together of the diverse nationalities of Europe?

But we ourselves have not been without an example of his talent in the United States. Before the presentation to New York of the statue of the young Lafayette, now standing at the head of Broadway on Union Square, Boston possessed a specimen of his craft. Every one who has been near the modern quarter of Boston, lying on made ground close upon the Back Bay, must remember the square church tower on which stand angels with gilded trumpets at the four corners just below the eaves. They lean out from the tower in such high relief that they almost form complete statues against the sky. The angels call attention to four friezes that run between them; instead of being near the street they are high up on the tower above the roofs of the adjoining buildings. These were modeled in M. Bartholdi's *atelier* in Paris. The figures on them are many, and have been cut in a peculiar style of bass-relief in order to overcome the height a which they stand as well as the sharp angle at which a person on the street below has to regard them. It is not generally known that the head on one of the figures is a likeness of President Lincoln. New York followed Boston in owning a specimen of Bartholdi's work when French citizens presented her with the Lafayette just mentioned. The energetic side of the sculptor's character is already seen in this bronze. He has made a portrait of Lafayette as he looked in his earliest days of fame, when, being still almost a boy in years, he was stung by the insolent indifference with which an English prince of the royal blood spoke of the discontented Americans. The authorities for his face and figure at that date were found in records of the government to which Bartholdi gained access in Paris. In this way Lafayette must have looked when he escaped from France in order to put himself at the orders of Washington. To express his impetuosity, his generosity of temperament, and to embody his response to Washington, M. Bartholdi has represented him in suspended but decided action. He has taken advantage of the fact that a

noble equestrian statue of Washington, by Brown, stands on Union Square not far from the site proposed. Hence he has made him in the act of taking a step in the direction of the great general and sweeping toward him with his left hand a mute offer



LAFAYETTE STATUE, UNION SQUARE, NEW YORK.

of his services. His right presses a sword to his breast with a gesture of devotion and as if making a vow. We may imagine the moment to be that when Washington told him that the American troops he would have to lead were badly drilled and worse equipped. "I have come hither," said Lafayette, "not to criticise, but to learn."

The young enthusiast in the cause of liberty stands on the prow of a galley, symbolically treated, which commemorates his adventurous trip over the Atlantic. How different-looking a man Lafayette afterward became can be seen in a picture hanging among the Lenox pictures at the library in Central Park. It was taken during his tri-

umphal visit to the United States some fifty years ago. The lower part of the face had grown heavy and wrinkled. But the picture shows only a curious later phase of the real man, for of course Lafayette will always be the French noble youth who, by resolving to devote his energies to the liberty of the American nation, hastened and perhaps compelled the court of France into active measures against England.

But a subject which gave Bartholdi even better scope for the energy of his temperament was a commission for a statue of Vercingetorix, the Gaulish leader who roused his countrymen to throw off the yoke of Rome, the man who gave himself up to Caesar when all was lost, in hopes that the conqueror would spare his fellow Gauls after satisfying his revenge on himself. The statue was exhibited in the Salon of 1870, and is now in the galleries of the French government. It was intended to be placed on a rock above Clermont, where it would be in strong relief against the sky. Owing to its startling action, the figure is so balanced that it can only be cast in bronze; stone would be unmanageable. Unlike the Vercingetorix of Millet, which stands on a hill overlooking Alise-Sainte-Reine,—the ancient Alesia,—this statue is to show him in the tide of success, leading such a charge as Murat afterward loved. Millet's Vercingetorix stands in melancholy thought, meditating his sacrifice of liberty for the sake of his remaining followers, but that of Bartholdi is in swift motion, on horseback, as if madly charging on the enemy. He is half turned in his saddle and calls on his men. The sword-arm is straight above his head, brandishing the weapon with an electric gesture of daring and command. The figure is so managed that it can hardly fail to strike the attention a long way off. Bartholdi means that any one approaching shall be compelled to ask: "Who is this rider, so excited and impetuous?" A nearer approach discovers a Gallic horseman in full charge. "It must be Vercingetorix," the traveler will say to himself, "who leads his countrymen against the Roman oppressors."

Yet M. Bartholdi would be hardly fairly treated were his violent, emotional statues only to be mentioned. At Avallon there is a bronze statue of Vauban, who, although a soldier, was a philosopher of war. He is dressed according to his age, with curly wig, grave and ample coat, soldier's boots, and wears a sword. Near him are em-

blems of fortifications and weapons for sieges. His head droops pensively, for he stands immersed in thought. This fine piece of work is of heroic size, and stands in a park at Avallon. Similar to the Vauban, but more concentrated and pondering, a marble statue of Champollion attests a further range of M. Bartholdi's genius. The Egyptologist is bent over with the gesture of a man wrestling profoundly with some weighty



HAND OF THE STATUE OF LIBERTY.

secret. A sphinx's head at his feet, on which his eyes rest, symbolizes those Egyptian hieroglyphs which his penetrating mind did so much to unravel. This marble is in the *Collège de France* in Paris.

Again, a monument to Martin Schön at Colmar gives an example of M. Bartholdi's turn of mind to architecture. It is composed entirely of just such brown stone as we use so much for house-fronts in New York, and consists of a statue of Martin Schön, the illustrious painter and engraver of the fifteenth century, and an elaborate pedestal with figures and bass-reliefs, representing the four quarters of the globe. Colmar claims Schön as her citizen, not only in life but at birth. In his day and generation he was a great celebrity in the world of art, so much so that he obtained a special

name in France and Italy. His real name appears to have been Schöngauer—Martin Schöngauer—probably because his family originated in some place called Schöne-Gau, or beautiful meadow, in lower Germany. Hence Martin would be his proper name, and, as a distinguishing mark, Schön was added, partly because of the pun on his beautiful workmanship, partly because Schön is easier to use as a nickname than the longer version. At any rate Lamberto Lombardi writes to Vasari concerning him, as follows:

"Then arose in Germany a certain Beautiful Martin, an engraver on copper, who did not abandon the manner of Roger his master, but yet did not reach to the beauty of his coloring. From this Beautiful Martin are derived all the celebrated workmen in Germany; in especial that most lovable Albrecht Dürer, disciple of this Beautiful Martin, followed the manner of his master, approaching much nearer to the natural, etc., etc."

For this reason the citizens of Colmar, who have formed a Martin-Schön Club and purchased an old convent to serve as their museum, honored the old artist with a monument and statue. But although the Germans, possibly on such Italian authority as that just given, call Schöngauer a founder of a German school in the fifteenth century, yet the modern descendants of his fellow-townsmen do not seem ready, just at present, to claim the Teutonic relationship with great fervor. A proof of this lies in the cemetery at Colmar. M. Bartholdi is the author of a design for a grave-stone of singular vigor and boldness, which commemorates the men fallen in French ranks during the late Franco-German war. What the feeling in Colmar at annexation to Germany must be, can perhaps be learned from a brief mention of the design.

The head-stone is severely plain but massive, and upon it one reads these words only:

"Morts en Combattant  
14 Septembre 1870."

The grave is covered by two great slabs of stone, but one of these has been pushed up from below by an arm. This arm reaches out from the dark opening of the grave and gropes on the surface of the other slab for a sword which lies near. The arm and sword are of bronze. The idea of this tomb reminds one of the Gothic ghastliness that pleased Albrecht Dürer and the engravers of his day, but the monument is also one of those trumpet calls, silent but never-ceasing, which keep alive hatred and





THE STATUE OF LIBERTY AS IT WILL APPEAR IN NEW YORK HARBOR.

finally summon a conquered nation to terrible acts of retaliation.

To give one more example of M. Bartholdi's range in smaller works of art one may further instance his "Grief." It is a woman bowed down and utterly overcome, who covers her head with her mantle and leaves only the outlines of her figure showing through, to depict her despair. This was exhibited at the Centennial. The fountain which was also to be seen there as a specimen of Bartholdi's work in that line has been bought by Congress, presumably for the grounds of the Capitol, at Washington.

It cannot fail to strike one who has examined the gigantic hand of the statue of Liberty which was exhibited at the Centennial and, later, on Madison Square, that a figure of this kind is, in a certain sense, a piece of architecture. To be sure, the figure is a statue as well, and its model requires as careful a treatment, if a somewhat different one, as a legitimate piece of statuary. But it has to be built up like a light-house and its walls calculated for the resistance it will offer to winds and weather. The pedestal to the statue of Martin Schön at Colmar has been mentioned as an earnest of M. Bartholdi's ability in that line, but his designs for the palace of Longchamps at Mar-

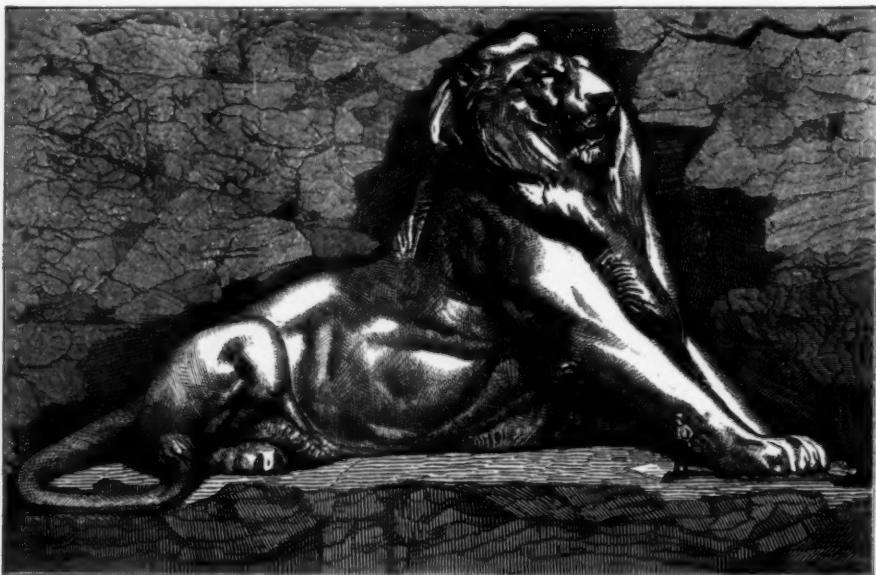
seilles are much more serious. The problem before him was the uniting of a *Musée des Beaux-Arts*, a museum of natural history, and a *Château d'Eau*, into one building. This he accomplished in a design full of grace and nobility. The work was not undertaken for a number of years and when begun was intrusted to an architect of Marseilles who was forced to use the main points of M. Bartholdi's plans. Where he has departed from them, his building also departs from good taste.

When M. Bartholdi arrived in the United States to study the question of site and statue for a Liberty, he had even more difficulties to overcome than in the case of the palace of Longchamps. The statue was to be gigantic in order to represent somewhat in size the greatness of the young nation and the unusual magnitude of scale on which the land is molded. A great and growing nation, an enormous half-continent, cut by the largest and deepest rivers in the world and diversified by long mountain ranges, required to be symbolized on a gigantic scale. But if the statue was to be gigantic, it could not be solid, or composed of heavy materials. And since North America has been famous on the sea and New York is a commercial center, the most appropriate statue might be one which combined with the idea of

liberty a hint of the ocean and an allusion to trade. Hence we may suppose M. Bartholdi making up his mind that his Liberty should not merely embody the fixed resolve to secure independence that brought the Colonies through the Revolution, but should be a beacon to ships and should stand in the center of New York Harbor, the first thing to greet the eyes of immigrants when land heaved in sight. To show that the sculptor was not unprepared to deal plastically with the various ideas suggested by the circumstances, let us revert again to his earlier life.

When he began his artistic career the

of the sculptor, appears by no means to be recent. Many years ago he traveled in the East, and found in Egypt the prototypes of gigantic art. Travelers of artistically sensitive minds have always wondered what might be the secret of grandeur in Egyptian colossal statues. M. Bartholdi traveled and gazed, was impressed and pondered on his impressions, until he thought he had penetrated some of the reasons for our admiration of primeval art. And on his return to France his reflections did not remain without a chance to test their worth. The defense of Belfort, a little town occupying a strategic point of great importance high up in



Edouard S.

THE LION OF BELFORT.

parents of the young sculptor objected strongly to a departure from the traditions of the Bartholdi family. If he would not be a clergyman, he might go into trade and perhaps some day become the burgomeister of Colmar. But the youth thought otherwise, and, having got an entrance into the studio of Ary Scheffer, he was encouraged by the latter to stick to art and cast trade to the winds. Had it not been for Ary Scheffer, perhaps M. Bartholdi would now be a burgomeister, oppressed by Prussian bayonets, instead of an artist, with a widely different work in hand. And in the career which he chose, the turn for the gigantic, which may seem a whim

the Vosges mountains, gave rise to excessive admiration in poor France, only too glad to derive some comfort from her humiliating campaign against Germany,—only too ready to applaud heroism in a handful of men, when so many thousands appeared to have degenerated. It was the one town that held out against great odds, that would not be even starved into surrender. The defense of Belfort, then, was to be commemorated by a statue of a lion, and M. Bartholdi was the sculptor. Against the face of the plateau on which stands the citadel, originally fortified by Vauban, he has fashioned, partly by cutting into the reddish rock, partly by building up

with stone, an enormous lion, which is half raised up from a lying position, as if aroused by an arrow which lies at its feet. The great beast seems to be uttering a roar. To this as yet unfinished statue M. Bartholdi has applied some of the Eastern lore which he thinks to have discovered in Egyptian colossi. One theory is that put in practice with the figure of Vercingetorix, before mentioned. The lion must be so relieved against the background that no one could mistake its action at whatever distance seen. Another is, that details must consist of great masses on which the distant eye can take hold; that the mane, for instance, cannot be treated minutely, hair by hair, but in great tresses which at a distance shall give the effect of hair, although the relative proportions may be entirely arbitrary. Again, there must be no deep depressions in the figure which by throwing shadows would interfere with the distant effect. Or, to say very much the same thing in other words, the treatment of the colossal requires that broad and, if possible, rather flat masses should be presented to the eye. A glance at the accompanying picture of the Belfort lion will explain this. All these theories are meant to come in play with the treatment of the statue called by M. Bartholdi "*Liberty Enlightening the World*," of which two pictures are here given, one to mark its position in relation to the surrounding country, the other to show the statue itself.

From the former, one can see that Bedloe's Island is a very central point in the complex of rivers and islands forming what is really the city of New York. Manhattan Island is only one and the chief portion of our city. Hoboken, Jersey City, Staten Island, Bay Ridge and Brooklyn are already parts of it; in the future they will always tend to be bound more closely to New York proper. Bedloe's Island is therefore a nearly central point in the Upper Bay, about which lie these detached portions of the future if not of the present city, and its small size will only add to the effect of any gigantic statue erected on it. The fort will be an advanced part or terrace to the pedestal of the figure, which will rise high above any other object in the immediate neighborhood.

Allowing twenty feet for the height of the island above the water, the pedestal is to be one hundred and ten feet high, and the statue, to the flame of the torch, one hundred and forty-five. This makes the torch at least two hundred and seventy-five feet above the level of the bay. It will equal in

height the column in the Place Vendôme at Paris, and will be larger than the colossus of Rhodes, so much celebrated by antiquity. Like that statue, it will have to be cast in pieces of manageable size, and built up much after the manner of an armored frigate. The construction will be a curious piece of engineering skill, for which the sculptor and Mr. de Stücker will be responsible. At night it is proposed that a halo of jets of light shall radiate from the temples of the enormous goddess, and perhaps the flame of the torch may be fashioned in crystal, in order that it may catch the light of the sun by day, and at night form a glowing object illuminated by electricity.

In respect to the pose of the statue, that has been calculated with care. A Liberty would have to be draped, even if a draped statue were not advisable in a climate so cold as ours, where nude figures suggest extreme discomfort. But M. Bartholdi has also used his drapery to give a tower-like and therefore solid look to his lofty woman without forgetting the necessity for variety in the upward lines. Or perhaps it would be better to say that he has followed the laws of stability to be seen in the trunks of trees, which are very broad at the ground, where the roots are indicated, yet by no means of one monotonous breadth from the root to the branches.

She will stand so as to suggest that the strongest hurricane could never budge her from the pedestal she has chosen. Her gesture is meant to call the attention of the most distant person, and, moreover, to let him know unmistakably what the figure means. For in this statue, also, M. Bartholdi has applied his science to fine effect in getting the figure outlined against the sky, while the energetic attitude has not interfered with a certain dignified repose which inheres in the resting position and which may be owing to the weight of the body being thrown on the left leg, as well as to the grave folds of ample drapery. Even if a stranger approaching from the Narrows should not know at once what she is holding up for him to see, the energy of her action will awaken his curiosity, and the dignity of it will make him await a nearer approach with confidence. When he can make out the tablets of the law which jut from her left side as they rest on her bent arm, and the flaming torch which she holds high up above her head, while her eyes are fixed on the horizon, he will be dull indeed if he does not understand what she wishes to tell.



"LIBERTY ENLIGHTENING THE WORLD."

The statue, then, that is to be the most noticeable ornament of our harbor and city, has come from the brain of no novice in his profession. The studio of Ary Scheffer is no bad starting-point for an artist; the worst thing that M. Bartholdi may have had to contend with has been the oppressive atmosphere of the Third Empire, which he was compelled to breathe. Painters and sculptors, as well as

literary men, must have languished under the want of appreciation of true genius, if not the full bloom of vulgarity, which affected the court of Napoleon III. But M. Bartholdi can hardly be said to have been spoiled by appreciation in Paris during the Empire; on the contrary, his life has been full of hard work. Turning back to the first page for a drawing of the sculptor's head by Mr. Wyatt Eaton, the reader will see that his face bears the mark of one who has labored hard. Indeed, without a portrait, one may come to the same conclusion on looking over the list of his already accomplished works.

His statue of Liberty is not such as an American artist would be likely to erect. In the first place the name would be a piece of buncombe like those that foreigners sometimes cast in the teeth of Americans, but of which Americans usually prefer to deny the authorship. Even if we can feel some pride as being a model to republics, we could hardly go so far as to erect a statue looking over toward Europe and call it "Liberty enlightening the World." But when another nation puts it up for us, we cannot afford to refuse the honor with hypocritical disclaimers. For with individuals an excessive sensitiveness to a compliment is apt to argue some form of egotism,—self depreciation, let us say. Yet for all that, one would not hazard much to say that the general run of Americans are not as enthusiastic about this statue as they would have been, were its size smaller and its name more modest. Familiarity with republicanism or liberty of the American type breeds con-

tempt, and Americans at home cannot be expected to regard their liberties with the same admiration as Americans and their foreign friends abroad. Perhaps it is just as well that this should be so, for the vexations incident on maintaining republican liberties may act as a wholesome restraint on any tendency toward national self-glorification.

## TO DAMASCUS BY DILIGENCE.



THE CALL TO PRAYER (FROM PAINTING BY J. L. GÉROME).

At six o'clock in the morning, the white mountains of Syria are well worth seeing. The lights and shades of mountain sunrise scenery awaken in the beholder a sense of the sublime, and arouse the traveler to the enjoyment of heights and depths, rapidity of motion, clear atmosphere and the very fact and joy of life. To get the full benefit of a bright day on the "goodly Lebanon," one should be well mounted on an Arab mare, which, answering to the rider's impulse, will devour the ground

at times, now stopping at convenient points for views, and now picking her way among the winding defiles and rocky ascents. Traveling there and sleeping in tents, one may realize something of the rural life of Abraham, Isaac and Jacob; but in going to Damascus by diligence, on a macadamized road, there is such a mingling of the ancient and modern,—the Orient and the Occident,—that you can hardly identify either.

Our summer had been spent in the village



B'hamdoon, which nestles upon the mountain-side about five thousand feet above the Mediterranean Sea, and about five hours distant from it. Starting at six o'clock, we



DAVOUD PASHA, CHRISTIAN GOVERNOR-GENERAL OF MT. LEBANON.

reached the carriage-road at seven, where we met the diligence from Beyroot, and jumping in, we bowled away over the hills at a rapid rate, passing around summits that we did not surmount, and through scenes of grandeur that we have no power to describe. Relays of six fresh horses every hour give one the benefit of their best speed, and the delay of fifteen minutes at every station affords opportunity for short walks, which lessen the fatigue of carriage attitudes.

The old route over the Lebanon from Beyroot on the sea, to the plain of Cœle-Syria, and over the Anti-Lebanon to the oasis of Damascus, has been described by crusaders, pilgrims and travelers, by poets, soldiers and statesmen; but justice cannot be done to the view which ravishes the eye as one descends the first great range. The plain stretches ten miles away to the Anti-Lebanon, with the ruins of Baalbec on the left, while Mount Hermon looms up majestically on the right, and the intervening ground is variegated with colors of every hue. The ripening grain, the dark plowed land, the trees of verdant foliage which follow the little streams, the mud villages of the fellaheen, the feeding

cattle and the tents of wandering Arabs, make up a picture of quiet beauty. Baalbec is not visible from the diligence. If it were, many travelers would content themselves with a distant and unsatisfactory view, and thus lose one of the choicest bits of Oriental travel now furnished by tenting amid the ruins. But Mount Hermon is visible almost everywhere from Dan to Beersheba, and far away to the north. Through all this scene of pastoral loveliness, and over bridges that covered what at a distance seemed the merest silver threads, dashed the great diligence. The road across the plain is a painfully straight line, and behind us is a long white cloud of dust; but the monotony is broken at the entrance of this great valley by the noonday rest at the half-way house of Shtorra. Here by the side of a running stream our first class passengers have a quiet lunch in a room apart, while those of the second class feed in less pretentious quarters, or eat their own crackers and cheese, or bread and olives, as they stretch their weary limbs,—all according to the tariff rates of the bill of fare. The water is delicious. We drank from the stream, and watched the ducks and geese paddle up and down its current in search of falling locusts. The children found their greatest pleasure here, and this green spot will ever be to them the brightest of all in our hot July ride to Damascus. Had they been permitted to wade in the water, their happiness would have been akin to that of the Moslem's paradise, where running streams rival the charms of the houriis. The winding horn of the guard summoned us from our dish of *leben* (butter-



THE START FOR DAMASCUS.

milk) and hard-boiled eggs, so the children bade a hasty adieu to the pretty brook, and we were all shut up again at the mercy of

and gladness, and the traveler laughs in harmony with nature's smiling. Here were pleasure and beauty, and refreshment for soul and body. What wonder that Naaman the leper preferred these waters to those of the Jordan, or that he was astonished at the imputed merits of a stream in Palestine on the banks of which no city stood!

At sunset we passed the great Meidan, a suburban treeless park, on the other side of the river, where horses were galloping to and fro. As we approached the city, we were followed by numerous parties of Moslem equestrians who seemed to enjoy the fun of riding in the



AN ARAB GYPSY ENCAMPMENT.

six galloping steeds and the caprice of a driver's whip.

This plain is about seventy miles long, with an average breadth of seven miles; and, although 2,300 feet above the sea-level, was stiflingly hot, and our pleasure was lost in our longing to reach the next range with its commanding views. What had seemed so beautiful from the Lebanon lost its attractions as we rolled over its surface, and we were content to leave that "happy valley" to any Rasselas and his friends who might choose to occupy it,—even under the new law of property which accords to foreigners the right to purchase real estate. Another change of horses and we gained the ascent, and as we rolled slowly up the pass we regained something of our former enthusiasm. The enchantment lent by distance came out again, and the picture of the plain brightened as it took its flight; but we looked forward eagerly to other beauties yet to be revealed. A few more relays and we were in the Elysian Fields, which, watered by the "rivers of Damascus," satisfy longing eyes with tall maple and poplar groves, and glades and delicious streams, and environ and embower the oldest city of the world. Our road for an hour ran through this delightful land, with canals for irrigation on either side, and near the Abana, which has made this desert an Eden. Here were joy

wake of this leviathan of the road, until the diligence entered the inclosure of the Imperial Ottoman Road Company's establishment. The curiosity among the men



A STREET IN DAMASCUS.

and boys continues unabated, and the company is obliged to close its immense gates to exclude the great multitudes of

Moslems who come flocking to witness the arrival of the "big carriage," and to see it disgorge from its cavernous depths infidels and aliens from distant lands. From



AN ORIENTAL SHAVE.

the top of this lumbering vehicle travelers leap full-armed,—like Minerva from the front of Jove, shall we say? No, for history does not say that Minerva was a carpet-bagger, or that she carried a green cotton umbrella,—while from the *banquette*, the *coupé*, and the capacious *intérieur*, issue fat Moslems, dilapidated Jews, and unworthy Christians, at the rate of ten or twelve per day.

Having approached Damascus by the carriage-road, we missed the horse-path which has been famous since the days of Mohammed. From the Salahieh, the founder of Islam looked down upon this oasis with the shining city in the midst, and ravished with delight, uttered the oft-quoted words: "As man can enter but one paradise, I prefer the heavenly." The rivers, the gardens, the groves, interspersed with mosques, minarets, and bazaars of every size, which make up Damascus, as seen from that hill, so resembled the heaven the prophet idealized, that he turned away from the temptation and would not enter in. It was from a spot near this traditional site that the artist Church took his view when he painted his famous picture of Damascus for the late John J. Phelps of New York. "Pearl of the East," "Emerald of the Desert," "Paradise of Perfumes, Good and Bad," are some of the names given in Arab song, while one writer describes the city, with its large body tapering off to the south till lost in the gardens, as resembling a swan with its long neck stretched out into the grass; another

says that "Damascus, with its three hundred minarets rising above an ocean of foliage, had the appearance of a vast fleet anchored afar on a green sea." A party of travelers

whom we met there on a former visit described the view as "awfully jolly," "just lovely," "nice," "deuced fine," and "charming," so that it is fair to infer that there are elements in that landscape to please the eye of all classes and in every age.

We were met at the station by our friend, Dr. Meshaka, the American vice-consul, who is one of the few "wise men of the east," and by the only resident American missionary, and were

taken to the consular residence. The city, I discovered, had undergone much change since my first visit, six years before, both in its appearance and in the manners of its inhabitants. The burning of the Christian quarter, the public execution of the Governor-General with many of his subordinates, the hanging in the streets of more than a hundred of the city notables after



SHERBET.

the massacres of 1860, the carriage-road from Beyroot, and telegraphic communication with Europe, Asia, Africa, and America,

have made an impression which even the proud, fanatical and bigoted city of Damascus could not resist. Christians might now ride through the streets and hold up their heads in any dress that pleased their fancy, whereas formerly they were compelled to walk and to dress in black. It was with no little satisfaction that we saw our host—whose house was among the first assaulted, and who received severe wounds upon his person—ride upon a large white mare through the Moslem quarter. But our host is entitled to a more elaborate introduction. He traces his ancestry back through generations to the isles of Greece, and is thereby enabled to claim and enjoy foreign protection, but he is a native of Syria, and is thoroughly identified with the Christian population of Damascus. One of the earliest converts of the American missionaries, and a graduate of the medical school of Egypt, he has for years held a deservedly high rank as a controversial writer and a man of scientific attainments. He is well known for his enthusiastic adherence to the doctrines of the Reformation, and for his courageous and persistent exposure of the errors of the Oriental sects. Yet, so broad is his genial liberality and affectionate intercourse with the laity and clergy of every sect, that his influence, even in a fanatical country like this, is very great, and all classes look up to him with respect, and visit him familiarly for his advice in matters physical, temporal, and spiritual. During our short sojourn he was visited by the notables of both church and state; and we noticed with surprise the plainness of his speech, and the kindly manner in which his scathing expositions of error and injustice were received. To the high clergy of the Latin church he pointed out those passages in the huge Arabic Bible, which, in his opinion, proved Rome to be the scarlet lady, and the pope to be the beast. These propositions were discussed in the mildest manner, and when we expressed amazement at his freedom of speech to guests in his own house, the good old Doctor laughed, and appealing to the superior of the Latin convent, who sat near him, also holding an open copy of the new translation of the Bible, said that it was his

duty to be frank with all his friends, and they, knowing his sincerity and friendship, never took it amiss, but continued to frequent his house, where the subject of religious truth is constantly under discussion.

The old gentleman is failing now. The wounds received upon his head from the ax of a murderous Moslem during the recent massacres, and his old age, are together telling upon his huge frame; and although he



INTERIOR, WITH FOUNTAIN.

continues to write books, he has arranged all his affairs in view of his approaching death, and occupies himself principally with the study of the Bible. He dresses in native style and speaks the Arabic language only, but his sons are good linguists, and supply all his deficiencies. The Turkish Government rebuilt his house and paid him about \$20,000 in gold, as indemnity for his personal injuries.

Now that this introduction is over, let us look about us as we proceed toward our resting-place for the night. The great wooden gates which divide the city into sections, the wooden arches which shut out the sunlight from the covered bazaars, the overhanging and almost crumbling upper stories of the dwelling-houses, the stagnant cess-pools in the narrow and concave streets, and the ruins of the Christian quarter, impress the mind of the new-comer with more

of wonder than respect. The passers-by, wearing the sugar-loaf hat of the Persian, the turban of the Moslem, or the kefiyeh of the Bedouin, who with tufted lance and iron-heeled boots lounges or rides roughly by, bewilder one with their variety of costume, and make the contrast between an Eastern and a Western city more complete.

The walk to the consulate was a long one,—at least a mile, through a densely packed town of 150,000 inhabitants; and its length and the old columns that stood in fragments with Corinthian capitals to mark their origin, and the gate-ways with their elaborate ornamentation and pointed arches,

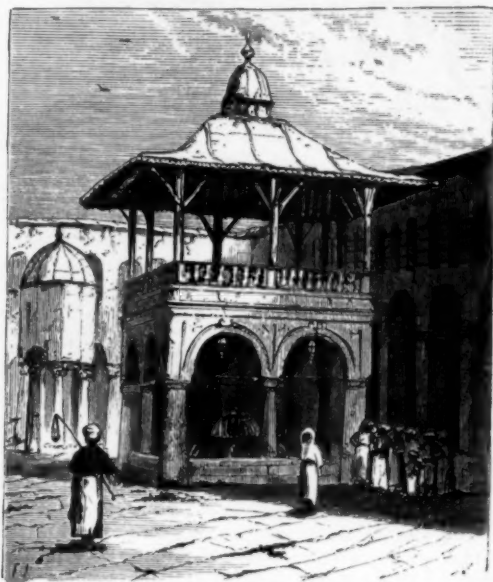
of the dervish or Moslem sheik, seemed in the weird twilight to belong to another world. The low door-ways, built expressly to prevent Turkish soldiers from riding into the houses, and to mislead the rapacity of the Government, indicated habits of life not in harmony with Western tastes, and suggested days of oppression and deceit,—of misery without and splendor within. The odors of the perfume bazaar so affected our senses that we were hardly conscious of the movements of a stately Moslem, who, with slow deliberation was closing his establishment for the night; and the murmuring waters which were falling along the little

canals set into the walls of the houses, and in the street under our feet, so lulled our weary nerves that we were well prepared to enjoy the rest which remained for us a few minutes beyond. To an old resident, these sights and sounds had no novelty, but to one upon whom this panorama was first opened, it was more than Oriental, it was dream-land; and the spell was not broken when, passing through the long, low, narrow and dark passage from the street, we were ushered into the inner court of Dr. Mesharka's city residence.

Ten large rooms, with two alcoves, or three-sided apartments, were built around an uncovered court about sixty feet square, in the midst of which was a large fountain and basin of running river water, and orange and almond, lemon and oleander trees laden with fruit and foliage, growing at regular intervals out of the tessellated marble pavement. Here were verdure, water, light, food and repose,

a fit termination of a day of wonders, contrasts and fatigue, and in every respect suggestive of the marvels of the "Arabian Nights' Entertainments," of which this was one in modern dress. After dinner, at which we were too weary to do justice to the many courses, we were shown to our rooms in the second story to sleep or to meditate upon the mystery of Orientalism; we found beds spread for us on the floor, which was divided by a platform, three steps high, into two apartments. The room was not yet finished, but the arabesque carving in wood was most elaborate, and its patterns were duly copied in our albums.

This room was far outdone in the gorge-



A FOUNTAIN IN THE COURT-YARD.

in the midst of bazaars and miserable hovels, enabled us to realize the extent of the city limits, while we were reminded of the Greek, and Roman, and Saracenic periods of its history.

The latter part of the walk possessed a peculiar interest. The silence as night approached was almost painful, and was relieved only by the thumping of the silver sticks of the janizaries who preceded us. The narrow and crooked streets were uncheered by the light of heaven, except when here and there a red gleam from the setting sun straggled through the crevices of the roofs which overarch the streets; and the few persons we met, clad in the peculiar dress



ous but less tasteful gilt arabesque of the principal saloon below, which we were able to inspect and copy at our leisure in the morning. The children found their highest happiness in the water, which they found running from a dozen spouts into half as many marble basins around the court-yard, and, in some of which were swimming gold and other curious fish. The Doctor assured us that he had expended £1,000 on the arabesque ornamentation of the principal room, which he said was being prepared for the marriage of his eldest son. The work in Italian marble and gold leaf was, to our eyes, a great extravagance, and the panels containing pictures of cities with the flags of all nations afloat, seemed stiff and out of place in an Oriental town, where no foreign flag has been raised during the dominion of Islam.

Even consuls are not allowed the satisfaction of raising the flag of the nation they represent, and must rest content for many years yet, with the sole distinction of being preceded by janizaries or consular guards, armed with swords, pistols, and silver-headed staves, which they carry as a drum-major carries his staff.



A BAZAAR.

We had visited the reputed scene of Paul's descent from the wall in a basket and other traditional sites on a former occasion, and were now enabled to enjoy sober second thoughts. A long residence in Beyroot, a semi-European town on the coast, had not dulled our appreciation of the extremes of Eastern life. The great Khan of Assad Pasha and the tombs of the caliphs—the remains of a much more magnificent era—had for the moment the gift of tongues, which spoke of many things not found in books. Ancient history is seldom a favorite study with boys, but the leaves of this book, which lies spread open before the traveler, and extends from the Anti-Lebanon to the Euphrates, and from Aleppo, south to the Syrian desert, are full of geography in its most fascinating form, and of history in its most attractive shape,—Nineveh, Babylon, Palmyra, Bagdad and Damascus! What memories and associations are recalled by these names! Nations and empires, and millions of our race, have here lived, flourished, and found a grave in a space smaller in extent than the Mississippi valley. Of these famous places, two Arabian towns, Bagdad and Damascus, still remain, flourishing when compared with neighboring towns, but yet a mockery of their former greatness.

The walls of Damascus are low, irregular, and of different ages, and they constitute no strong defense, even against the Bedouins. There are four principal gates, and the city is divided into compartments. The various



ABD-EL-KADER.

districts are separated at night by numerous street gates. Of the three quarters of the city, corresponding with the great historic religions, the Moslem quarter is the best, having the most spacious houses and palaces and the greatest supply of water. The Christian quarter has about 20,000 Christians—one-half Greek, and almost as many

found, and but few—probably not more than a score or two—have yielded to the attractions of commerce, and established themselves in Europe for the purpose of trade.

The old houses of Damascus are built in part of clay or mud, but the greater number of modern buildings are now constructed entirely of stone. The peculiarity of their



HOME LIFE IN DAMASCUS.

Greek Catholics, with a few Armenians and Maronites.

How these Christians have been able to live in Damascus, one of the holy cities of the Moslem, cannot be explained upon the hypothesis that the Turk is utterly intolerant by nature or religion. These Christians, and the Jews also, have acquired wealth, and live in luxury in an interior city. That they are subject to many annoyances, mobs, riots, and even occasional massacres, is true; but with all these, the Arab Christian, or the Jew of Damascus, or of any other part of Syria, can with difficulty be persuaded to leave his native land. Among the hundreds of thousands who land on the shores of America from Christian Europe in search of homes more favorable to life, honor, and the pursuit of happiness, no Syrians are

architecture consists in the roofless inner court, and consequent exposure to the sun, dew and rain, and in the inclosed inner gardens, and fountains which stand in the courts and reception-rooms, sometimes in the window-seats, and the elaborate gilding and carving in wood, called arabesque, which is interspersed with mirrors and ingeniously worked marble.

The Christian quarter has been almost entirely rebuilt, and much better built than before the fiery destruction of 1860. This, like every other ancient city in Syria, has its street called "Straight." At Gadara, on the other side of Jordan, and in the great ruined cities on the Orontes, these main thoroughfares, or Broadways, are lined with the remnants of a thousand columns; but "Straight" street of Damascus is lined with bazaars and

small shops and humble houses. The remains of its former greatness have, no doubt, here, as elsewhere, been dragged away and built into the modern dwellings.

As the guide-books give full descriptions of the antiquities to be seen, we will only call attention to one remarkable Greek inscription which is still legible upon the magnificent portal of the great mosque which was once a Christian cathedral:

"Thy kingdom, O Christ, is an everlasting kingdom, and thy dominion endureth throughout all generations."

The fact that this inscription is allowed to remain in the midst of a fanatical people may be attributed in part to the fact that few are able to decipher it, while those who know its meaning may willingly allow it to grace the Mussulman conquest as a tribute to the more enduring character of the dominant faith.

On a former visit to Damascus we accompanied the American Minister Resident at Constantinople, who made an official tour through Syria in 1859. An escort of Turkish troops was furnished by the courtesy of the Governor-General at Beyroot to accompany us through his satrapy. As we approached Damascus we were met by an aid from the Governor-General of that province, accompanied by a band of music, and during the remaining ten miles of our journey, we were saluted by a regiment of regulars, and by bands of irregulars, known as *Bashi-bazouks*, and *Cossacks* and *Circassians*, stationed in squads along the route. Several military officers, vice-consuls of the different powers, and consular dragomans and janizaries, came out a mile or two to present their compliments to the American "Ambassador." Fresh horses gayly caparisoned with gilt trappings were led by sable grooms in order that the *Ulshi* and his suite might ride as guests of the authorities,—a courteous mode of offering us the freedom of the city.

Dinners and *soirées* followed each other in quick succession, and gave us an opportunity of seeing the principal houses and families of the Damascenes. Among the Moslems we were fed with every luxury from gold and silver plate, but were not permitted to enjoy the society of the Turkish ladies at the table or in the salon, though the ladies of our party were received in state by the ladies of every harem they visited. Among the Christians we were entertained with music and dancing, with Oriental jugglery

and buffoonery. The Arab ladies, Jewesses, and Christians alike were pleasingly affable, and conversed fluently upon subjects with which they were familiar, and many of them played gracefully upon a stringed instrument resembling the Spanish guitar, but with strings indefinitely multiplied. Their style of dress and personal adornment would tax the ingenuity of a New York fashion reporter in an attempt to describe their garments, jewelry, and cosmetics; but the reader is familiar with the braided and bejeweled hair, gazelle eyes, pink-and-white complexion, full bust, *embonpoint*, henna-dyed fingers, and invisible and betrowsered feet.

The interior of each house is of a pattern peculiar to itself as to ornamentation in gold, marble, wood-work, fountains, and each constitutes a subject for conversation, in which the ladies of the house are always fluent, and one which takes the place of "the weather" which is sometimes discussed in more variable climates. "Old Probabilities" would find no occupation here. As it does not rain in Damascus for six months of the year, of course almost every day is fine, and any remark on such monotonous weather would seem very flat.

The houses are all alike in one respect,—in being constructed in a hollow square, with house-tops so flat and so protected that they afford places of retirement and repose to those who would be alone. It is not unusual, however, to see entire families sitting together upon the roofs of their houses, and in some parts of Syria the people sleep on the roof. During this visit, made before the massacre, we made many acquaintances among the native gentry, and were grieved to learn that in 1860 some of these estimable people were killed in the streets, and their wives and daughters carried out of the city to the harems of the rural Moslems.

One interesting feature of this official visit was the formal calls made by the Patriarchs of the Greek, Greek-Catholic, Armenian, Latin, Syriac and other religious bodies whose Syrian center is at Damascus. They talked freely of the condition of their sects and of their relations to the dominant Moslems, while the *Ulshi* gave, through our interpreter, elaborate explanations of our government and the constitution of our country, which recognized no state religion, but protected all religious communities alike. This suggestion of toleration and of freedom of conscience seemed to impress them somewhat dubiously, as either one of

these "heads of communities" would, if in power, put down the others and show even less toleration than the Mussulman. We did not see Abd-el-Kader, the famous Algerine chief. In his own country he was a prince, and here he was in exile and did not make visits, on the ground that he gave all his time to religious meditation. The *Ulshi* did not make first calls, and so these representative men did not meet. This was a matter of regret to us, as Abd-el-Kader subsequently saved the lives of our vice-consul and his family, and those of twenty thousand Christians beside, when the fury of a fanatical Moslem population seemed bent upon the extermination of all Christian residents in the city. In recognition of these services he received handsome presents from our own and European governments, and still exhibits them with pride to those who call upon him.

Nor did we call upon Lady Digby, once the wife of Lord Ellenborough, who was living quietly as the lawful wife of Sheik Miguel, the most popular escort of travelers to Palmyra. But on a subsequent visit to Damascus we were presented to her, at an entertainment given by the British consul, Mr. Rogers, and found her full of intelligence, with much of the remains of her former beauty. We heard of nothing which detracted from her reputation since the date of her marriage with the sheik, as a kind, genial, and quiet member of the European society. She had been greatly annoyed by the indiscreet curiosity of travelers who had invaded and described her boudoir and surroundings in letters to the newspapers in England and America, and she was not fond of strangers; but those who knew her well seemed to feel a hearty sympathy in her persistent efforts to redeem a life which had not been happy in its influence upon herself or others. We were pleasantly received subsequently at her house at Damascus and at Hums, a city of Northern Syria, when she took us to her stables and showed us her fine Arab mares, which were brought out by the grooms one by one, and all their fine points described. We sat on chairs in her reception-room, but when her swarthy husband entered and was introduced he sat cross-legged upon a divan in a corner, and smoked while the conversation continued. He has not a commanding figure, or fine personal presence, and we wondered what could have induced the daughter of Admiral Lord Digby, outlawed though she was, to enter the harem of this small Bedouin,

where she was obliged to divide the honors with another wife. But he was a young chief with influence among the tribes. She had before her the example of Lady Hester Stanhope, who became queen of the Arabs by means of her money and influence among the Bedouins of Palmyra. With her income of £6,000 per annum, she was able to live in state, and she was still able to command admiration and wield a scepter, although her court was less cultured than that which surrounded the young and beautiful Lady Ellenborough.

Rashid Pasha, governor-general of Damascus, received the American minister and his suite. Courteous, hospitable, educated after the school of Paris, he performed gracefully the duties of host, talked French with fluency, and dressed in good taste. But these qualities could not redeem his great faults; for while he imitated Sardanapalus in his vices, he had not the courage to die as a soldier. While the Christian quarter of Damascus was in flames, and Christians were being slaughtered by thousands, and their women carried off into slavery and concubinage, his Excellency spent his days in his palace reading French novels. And so, when six thousand French troops were landed in Syria, as the police of Europe, to protect the survivors, the Grand Vizier Fuad Pasha came down from Constantinople and took his Excellency out of his palace and away from his French novels, and had him degraded in the public square by stripping him of his uniform, and then caused him to be shot like a dog, in the presence of the representatives of the European powers.

Who can predict the future of this "eternal city" of the East? That it will outlive many modern cities of the West we can well believe, and that it will continue to be the stronghold of Islam, long after the followers of Mohammed are driven from the European provinces, there is as little reason to doubt. It may not be a comfortable home for the European, and the native Christian and Jew may be exposed to periodic outbreaks of Moslem fanaticism, but the past history of the Moslem Arab shows his toleration of unbelievers who pay tribute and who accept the government of the Sultan. Moslems and Christians have lived side by side for centuries, but never upon terms of equality. When the native Christian claims a representation in the local government, in the army and navy, and in the civil service, concessions are grudgingly

made by the Porte, and these are not cordially assented to by the people, so that there will always be turmoil and strife. But it is not certain that there would be less crime or religious intolerance if the same races and creeds were under the rule of the Czar. The Russian government is less liberal than the Porte, and an attempt to carry out its customary policy of reducing everything to a dead level by the introduction of the Russian language and the Russian religion by imperial *ukase*, would produce more bloodshed in the Moslem districts than has resulted from the policy of the semi-tolerant Turk. This could be accomplished only by the extermination of the native races.

It is probably written in the book of fate that the Danubian provinces, where Christians are most numerous, will become independent or pass under the protectorate of Russia. But when the Moslems are driven out of Europe, their rule in Syria will be less tolerant than heretofore, and the fanaticism of the people will be less easily curbed. Since the atrocities in Bulgaria, the Christians of Asiatic Turkey will be more cowed than before. Education and a purer faith have been making rapid progress, through the disinterested efforts of the noble men who have labored there as missionaries for two score years, but it is doubtful whether the most enlightened of the natives would willingly relinquish their present semi-independence for a less tolerant foreign yoke. And if Moslem rule is to continue in Syria, the friends of true progress may be thankful that though "propped by buttresses from without like the walls of a decayed monastery," the Porte permits all creeds to flourish, all churches to exist, and admits the missionary, the newspaper and the school throughout the empire.

The recent project for a national council, in which Christians are to have a part, is not of a nature to inspire confidence, for similar reforms on paper have not been accepted in the interior. The Christian members of provincial councils are generally time-servers, and are too abject in their servile submission to the Turk and too much in his power to secure any real influence in the local government; and this would be the case in any attempt to establish a national parliament, which would fail at Constantinople for the same reason that it has failed in Egypt,—because it was established as a form with a view to deceive. The hand may be the hand of Esau, but

the voice is the voice of Jacob. An incident within the writer's knowledge will serve as an illustration. A Christian member of the provincial *medjliss* at Adana, in Cilicia, ventured to vote in opposition to the views of the Pasha, who sent the member to prison in hot haste, there to meditate upon the beauties of a representative form of government. The friends of the prisoner asked the writer to intercede with his Excellency. One day, after a game of chess, I rallied the governor on his arbitrary act, and asked for the man's release. The pasha, as a favor to me, laughingly ordered his seal-bearer to go with me to the prison and release the man. The poor man was grateful for his liberty, but remained near me till I went out of the province, when he followed with my escort, remaining absent until the pasha was recalled.

It is a fallacy to assume that the right of asylum in our legations and consulates may be relinquished in Turkey with the same results as in Christian countries, for, until state and church are separated in Mohammedan countries, foreigners will not be safe from religious fanaticism or from persecution by local authorities; and for the same reason it will be unsafe to trust local tribunals, composed of Moslems and a few abject native Christians, with any control over the lives and property of foreign residents. Heretofore, foreigners residing in Turkey have had the right of trial by the consular courts of their respective countries, and the European governments maintain that right, as also the right of asylum, as guaranteed by treaty, but the Government of the United States has shown a disposition of late to abandon these rights upon the ground that it should not ask of other nations more than it is willing to grant to their subjects residing within its jurisdiction. This is to be regretted, inasmuch as Turkish tribunals are to some extent ecclesiastical courts, and are committed, in advance of trial, against any Christian who may be dragged before them.

By intimidation, the Turks, who are masters of the art of "bulldozing," can obtain the nominal support of Christian members to any measure, or by forging their signatures, can deceive the central government, so that there seems to be no hope for freedom of speech or conscience to the Asiatic Christian under Moslem rule. It is by no means clear, however, that the Russian government, if in possession, would be more tolerant.

And as these jealous and rival races, whose creeds are diverse and antagonistic,



cannot govern themselves, we are left to hope that in time they will work out their own salvation in being welded together by the fire of the suffering which they endure in common. In some respects the Moslem and the Christian are alike oppressed by their foreign master, the Turk, as in the

matter of excessive and fraudulent taxation, but in most matters the Christian is at great disadvantage, and is victimized by both, so that his fate is most hopeless; for it is a sad fact that the only sure way for a native Christian to improve his position under this government is to turn Turk.

### "THE SUNRISE NEVER FAILED US YET."

UPON the sadness of the sea  
The sunset broods regretfully;  
From the far, lonely spaces, slow  
Withdraws the wistful afterglow.

So out of life the splendor dies;  
So darken all the happy skies;  
So gathers twilight, cold and stern:  
But overhead the planets burn.

And up the east another day  
Shall chase the bitter dark away;  
What though our eyes with tears be wet?  
The sunrise never failed us yet.

The blush of dawn may yet restore  
Our light and hope and joy once more.  
Sad soul, take comfort, nor forget  
That sunrise never failed us yet!

### A STATE BALL IN CONSTANTINOPLE.

OUR first experience of Constantinople was most bewitching. We had arrived on a gala day,—the anniversary of the sultan's accession to the throne; and as we rounded Seraglio Point and came upon the Golden Horn, we beheld vessels of every nationality with pennants streaming to the breeze from stem to stern; dark groves of cypress trees, amid which arose graceful minarets and stately domes surrounded by glittering crescents, which formed a dense background to ships; while in the foreground were frail caiques shooting about in every direction, the whole composing a dazzling and never to be forgotten scene. When at last we were safe on *terra firma*, amid a perfect Babel of tongues (for there is nothing that strikes one as more remarkable than the fact that almost every person you meet in Pera speaks four or five languages fluently) we found awaiting us an invitation from the Minister of Foreign Affairs, Aali Pacha, to attend a ball to be given that evening at his "yali" or summer residence at Bebek, on the Bosphorus.

As the distance was considerable, we were to leave Pera at eight o'clock, so that we had scarcely time to unpack our trunks and rest, before we were obliged to prepare for our expedition. Fortunately, it was on a long summer day, the twenty-fifth of June, and the weather was charming,—a heavy rain the night before having completely laid the dust. We drove in an open car-

riage preceded by a mussulman on horseback, arrayed in the most gorgeous style, with richly inlaid pistols in his holster, and a yataghan by his side. He was a "cavass,"—one of a sort of native guard, a certain number of whom are appointed by the Porte to attend on each ambassador. Ours was a tall, splendid-looking Turk, named Mustapha, who ushered us into the barouche, and started off ahead, knocking down ruthlessly the tables and chairs standing in front of the cafés, and causing dire confusion among the women and children who thronged the streets, to say nothing of the lean wolf-like dogs which literally swarm beneath one's feet in every quarter of the city. This was the first manifestation that we were in a land of despotic power; but as our stately English coachman seemed to take it as a matter of course, and the indolent mussulmans reclining in front of their dwellings, smoking their "tchibouks" or "narghiles," looked undisturbed, we remembered Kinglake's description of the awe inspired by the great "Elchee Bey," and we too began to take everything as a matter of course.

As we drove along the shores of the Bosphorus the effect was magical. All the shipping was illuminated, every sail set, and behind each row after row of colored lamps were placed. The public buildings of Stamboul, and the slender, graceful minarets blazed with light, while the glowing reflection

cast on the deep waters of the Bosphorus, with the starlit sky above, formed a tableau of rare picturesqueness and beauty.

On arriving at our destination we felt as if we were living in the days of Haroun Alraschid. The villa was built directly on the water's edge, with marble steps leading to it for the accommodation of those coming in caïques, as did the greater part of the guests; for many of the wealthy families, both Turkish and European, had already taken up their abode at their country-seats on the shores of the Bosphorus, which it will be remembered extends for fifteen miles from the sea of Marmora to the Black Sea. The whole building, with every window open to the spectator, excepting the latticed casements of the harem, was one blaze of light; no less than thirty-five thousand lamps of every hue were distributed about the grounds, and the rooms were illuminated with superb crystal chandeliers,—it being a particular fancy of the Turks to import the most elegant and costly lusters France can manufacture.

Mustapha, dismounting, entered first, and announced us as the British ambassador's guests,—his Excellency being at that moment within, assisting at a state dinner given by Aali Pacha to celebrate the day. We were received at the entrance of the garden by an officer brilliant in gold embroidery, who, accompanying us to the door of the house, consigned us to two others similarly attired, who led us upstairs, ushered us into a superb ball-room, and introduced us to the Princess of Samos, who, being the first Greek lady in the place, did the honors in lieu of the Minister's wife, who could not of course step out of the precincts of the harem.

The room in which we found ourselves opened on one side to the water by numerous windows, on the other faced the garden, to which you descended by steps from a platform erected outside the center windows. We had scarcely time to look about us when the platform was filled by an ascending crowd of dignitaries, who had been dining beneath an *al fresco* pavilion in the garden.

Here were the Grand Vizier Fuad Pacha, a man of erudition and a perfect French scholar; Omar Pacha, the Turkish commander-in-chief during the Crimean war; all the foreign ambassadors,—among them he who was our friend and host, with his red ribbon and star of the Bath, looking almost unornamented by the side of the blazing diamond crosses and orders of those surrounding him, and yet wielding so much

more power; and many others who, by their official position, were entitled to be present. We were introduced to the members of the diplomatic corps, and as the other guests had not arrived, the princess deputed her niece, who was assisting her to receive the guests, to conduct us to the harem in order that we might pay our respects to Madame Aali, the Minister's wife. We were but too delighted to go.

How our hearts throbbed as we approached the door where stood on guard two gigantic Nubians nearly seven feet high, holding enormous canes in their hands! They bowed to our conductors, and lifting a curtain, we entered that abode of romance, which we had never expected to see. Had we paid our first visit to a harem in broad daylight, with no adjuncts of music, flowers and all the accompaniments of this brilliant fête, we would have been less impressed, and even as it was, the scene was different from what we had pictured to ourselves. The suite of rooms into which we entered was spacious and lofty, and carpeted with the finest India matting,—far superior to any we have ever seen in other countries; cushioned divans surrounded every room, elegant *jardinières* filled with flowers were plentifully interspersed, and in the principal *salon* stood a rosewood piano. Mirrors were inserted in the walls, and glittering chandeliers filled with candles were suspended from each ceiling; the windows went from floor to floor and were entirely filled in with lattice work. Through their apertures came the fitful light of rockets, which were constantly sent up from the decks of two illuminated boats anchored in front of the villa. The air was heavy with the perfume of flowers, and the well known strain of the serenade from "Don Pasquale" was wafted to our ear, played by the musicians belonging to the sultan and stationed in the garden beneath.

We were introduced to Madame Aali, a very intelligent-looking, amiable little lady, who salamed us in Turkish style by putting her hand to her forehead and her heart, said a variety of pretty welcomes by means of the interpretress, and taking us by the hand introduced us successively to all the high and mighty female magnates of the land. We were exceedingly disappointed in the toilets of these ladies; with the exception of their undervests of Broussa gauze, they were nearly all dressed in European fabrics of various kinds, full trowsers, slippers, an over-dress more like the *soutane* of a

Romish priest than any other garment,—the train of which they slip under a belt when they walk, in the same manner that he does. Instead of the long braided tresses which we had expected to see falling to their feet, their hair was cut short, and surmounted by an embroidered gauze handkerchief put on like a turban; but to compensate for the lack of Oriental splendor in the rest of their dress, their jewels far outstripped our imagination. This being the only manner in which Turkish females can safely invest money, and often all that is left to them at the death or sudden disgrace of their husbands, they seize every opportunity to enrich their store, and the display is certainly dazzling.

Madame Aali's turban was surmounted by a wreath of enormous pansies composed of diamonds, which completely encircled her head; and in the midst of the pansies rose, mounted on an oscillating wire, a bird, the size of a humming-bird, which was one mass of diamonds with flashing ruby eyes. Earrings and necklace matched this diadem in magnificence. Most of the other ladies were literally blazing with jewels, with the exception of the wealthiest and most nobly born among them, an Egyptian princess married to one of the pachas, who, whether from having lost a near relative, or from weariness and contempt of the gewgaws, had bedizened her numerous attendant slaves with jewels worth a king's ransom, and herself remained unadorned. One young married lady, about fifteen, was dressed in a French muslin of a brilliant corn-color, and next under it she had donned a crinoline, which articles were then worn very large, so that the effect of the steels, clearly defined beneath the scant folds of the transparent muslin, was ludicrous in the extreme; but the others looked at her with admiration, as she paraded her French organdie and hoop-skirt before them,—her girlish face surmounted with a regal coronet of magnificent gems. If the Moslems were harmonious in their dress before the time of Mahmoud, as they must have been from the accounts of travelers, its character has disappeared from the effect of his European innovations, for the scarlet fez looks as out of place with the straight-collared coat and modern trowsers of the men, as the short hair and French fabrics do on the women.

After our presentation, and the exchange of a few words with each through the interpreter, we were seated on a divan by

the side of Madame Aali, and slaves came kneeling down before us, bearing golden salvers, on which were gracefully, and even artistically piled, candied fruits of every description; others handed iced sherbet in large gold and enameled cups; and after the interchange of a few more compliments, we rose to return to the ball-room. I cannot say that I was impressed by the beauty of the Turkish women, although I must confess that they had more intelligence in their faces than I had been led to expect; they have all fine eyes, the languor of which is enhanced by artifice, and one or two of those present would have been handsome anywhere; but it requires the figure of a Diana not to be disfigured by such a baggy dress, and the little exercise they take detracts from the beauty of their complexions, not to mention their being shorn of the "glory of a woman"—her hair—which, if we mistake not, was the result of a special order of the sultan, who in our womanly judgment might better have let them spend their time in arranging it, and would perhaps thereby have postponed the present era of French governesses, and French novels, within the sacred precincts of the harem.

On our return, we passed through the antechamber, now filled with numbers of female slaves and the eunuchs attendant on the great ladies, who did not hesitate to use their club-like canes to push back the slaves who tried curiously to peer out each time the curtain was lifted. Our grim Nubians once more salamed, and we passed into quasi-European life.

The guests had now assembled, and to form an idea of the scene, one should imagine a *bal costumé* of the most luxurious kind and greatest variety as regards dress, and it must also be remembered that these dresses were worn with the ease and unconsciousness of habit, wherein this had a great advantage over any fancy-dress ball imaginable.

The sultan had sent his magnificent body-guard (afterward disbanded from economy), composed of picked men, two of each nationality under his dominion, dressed in the most gorgeous native costume that mind could invent, or money procure. Albanians who might have stood as models for Apollo, or Jupiter Olympus, adorned with snowy fustanelles, velvet jackets glittering with gold embroidery, pistols and sabers,—marvels of wrought skill,—moved amid the crowd as if they felt themselves to be of the god-like race of Hellas. Bedouins from the

desert, wrapped in the picturesque burnoose, Druses and Maronites, Smyrniotes and Armenians, Greek and Turk, Mohammedan and Christian, came and went, all clothed in the most magnificent dresses that could be purchased. The Europeans amused themselves with dancing, the others looked on, probably thinking, as a Turkish diplomat once told a friend in London, "that the English ladies were very foolish to tire themselves with a performance which was much better executed by their paid almés [dancing girls]!"

At midnight we went down into the beautiful garden, light as day, with every flowery parterre sharply defined by colored

lights carefully covered with wire to protect the ladies' dresses.

Resting upon Saracenic columns of green and gold, was seen a magnificent tent, literally of cloth-of-gold, embroidered with birds of gorgeous plumage, made for Sultan Mahmoud, at the cost of millions. Beneath it were spread tables sufficiently large for nearly every one to approach without crowding, and a superb supper *à la Française* was served to us on gold and silver dishes belonging to the sultan, as richly wrought as possible for metal to be.

We returned to Pera about two in the morning, and were soon lost in dreams of Fatimas and Selims, odalisques and bayadères.

## POND LIFE.

A TRANSITION from the more highly organized forms of vegetable life to the humblest existences of the animal world is in every sense a descent, unless the feeble suggestions of sensibility and purpose which occasionally manifest themselves be considered in the light of that magnificent fulfillment which they so dimly foreshadow.

Throughout the two great kingdoms of organic nature a curious parallel may be observed. Looking down the dim perspective of life to its beginnings, these lines appear to converge, and naturalists are forever confounding the forms belonging to them. Whole families have been classified, first as animal, then as vegetable; they have been shifted back and forth from this kingdom to that, with about as little reason for the change on the one hand as on the other. The very definitions upon which such classification is made have again and again proved erroneous. The naturalists of the present day have, it is true, solved many of the difficult problems of the past. The exquisite appliances of our time enable them to go deeper into the mysteries of microscopic life than could have been done by former observers; but the very instruments and appliances which have solved problems heretofore puzzling the world, have at the same time revealed new ones yet waiting for solution.

In the very latest explorations into that "debatable land" between the two kingdoms, definitions have gone down that have stood the test of years—which al-

though in the main true, will not admit of universal application. The ordinary distinction between the two forms of life, namely, that vegetables appropriate inorganic matter in the presence of light by means of absorption, while animals appropriate organic matter either in light or darkness by means of digestion, though it be as nearly true as any that can be didactically expressed, is still contradicted by instances which are entirely exceptional. There is in fact no single quality which has been named, as distinctive, of either kind of life, which may not be somewhere found in the other.

Some vegetables, as we have seen in the case of the insectivorous plants, appropriate organized matter by means of a true digestion, and some animals, as we shall hereafter see, have chlorophyl cells and possess cellulose in their investing membranes; and what is still more remarkable, it is found by the latest investigations, that undoubted animals live in Cohn's nutritive fluid,—which consists wholly of unorganized matter,—side by side with undoubted vegetable forms, and that both alike live and multiply in the dark. Here every distinction seems swept away. At all events, the mystery and the doubt have been pushed back, almost out of sight, if they have not been solved or satisfied.

If the experience of the past has taught the naturalists of the present nothing else, it has at least trained them in the true method of working. The indolent substitution of inference for observation is now no longer tolerated. Every phenomenon

which is observed and recorded becomes the focus for a thousand "armed eyes," which pass no fact unchallenged. That rigid scrutiny, that patient watching which the accurate observer of the past exercised only because of the inward compulsion of his own noble love of truth, is now demanded, and must be yielded because of the compulsion from without.

Theories—which are mere generalizations from facts—will, of course, continue to differ so long as every human mind is

sent—as single-celled plants do, in their own kingdom—the elementary cells of which higher organisms are built up.

The series in the animal world not only reaches infinitely beyond and above the highest vegetable development, but, strange to say, it begins lower down. There are a number of most interesting forms of animal life that we shall have to consider before we shall have reached the *amoeba*—those curious organisms which bear such a close resemblance to the lymph, mucous, migratory, and white blood corpuscles of the human body.

The discovery of *Bathybius* or *Proto-bathybius*, the gelatinous layer which appears to cover the entire sea-bottom, was hailed by the evolutionists as a new and still lower form of life than any known. But the *Urschleim*, as the Germans call it, or primordial protoplasm out of which higher forms might be evolved, under closer scrutiny seems to be no more than a mixture of many things living and dead; and so it is probable no forms of animal life lower

than those of the fresh water, either functionally or physically, are anywhere to be found.

The protomonas, one of the lowest forms in the animal world, forms a curious counterpart in development and reproductive processes, to the protococcus, which has been so fully described [SCRIBNER for December, 1876, "Single-celled Plants"]. A glance at Figure 1 will show the different developmental stages. The protoplasmic contents of the single-celled animal are seen to become granular; the investing wall either gives way or disappears, and the granules are seen to be zoospores, or the embryonic form of new individuals, into which they finally develop. The protomonas, like protococcus, has a motile and a still form. The cell at certain times becomes invested in a wall of cellulose, and the granular contents become colored with chlorophyll, both of which, as we have already seen, are characteristics of vegetation. It would seem as if this lowliest form of animal life had not quite escaped from the vegetable world, but spent half its time as a vegetable and the other half as an animal. These two peculiarities united in this tiny being are not, however, confined to it; for cellulose—that tissue which forms the walls of vegetable cells, and ultimately becomes woody fiber—occurs in the tunicates, and even in higher forms of animal life; and chlorophyll—the coloring principle of vege-

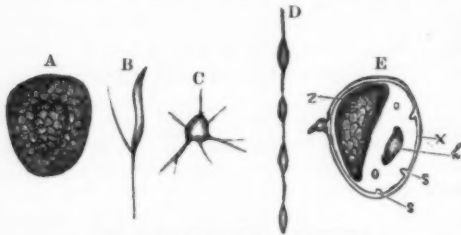


FIG. 1. DEVELOPMENT OF PROTONOMAS.

A, Moner during formation of zoospores; B, zoospores hatched out; C, D, the amoeba-like forms it assumes; E, encysted moner; x, s, projections inward of cell wall; s, cyst; s, foot.

not cut according to the same pattern; facts, however, are not permitted to gather much darkness about them, whatever may be their interpretation by different minds. The objection made to science, that it is subject to continual change, is both shallow and absurd. Phenomena may have been imperfectly observed; generalizations may have been made upon inadequate facts, but the body of physical truth has been steadily growing into new beauty and perfection through the ages; and the difficulty is only that men have not always been able satisfactorily to account for its principle of life.

In a series of articles necessarily so incomplete as the present, it will be impossible to keep to anything like a strictly progressive arrangement of the subjects. While, for instance, it is true that some of the simplest forms of animal life are to be found in fresh water, it is equally true that other forms no less simple, are inhabitants of the sea-bottom. Either subject—pond life, or the bottom of the sea—might with equal propriety be made to stand first; but there is a reason for making the order what it is. By doing so the parallel between animal and vegetable life in their lower forms is best maintained. There are certain organisms which are characteristic of, though not strictly confined to, fresh waters, and which more nearly than any other creatures repre-



tation—is found in the hydra; but it is curious that here, just at what we might call the dividing line between the two kingdoms, should be found a form apparently partaking, both in its chemical constituents and its mode of life, of the nature of each.

Among the lowest forms of life is a family formerly classed with the infusoria,—those microscopic beings which are invariably found after a time in infusions of animal or vegetable matter. A bit of raw meat, or a fiber of a plant, after it has been steeped for some days in water, and kept in a room not too low in temperature, will be found swarming with microscopic life. All such organisms at first received the title of infusoria; but a closer study and a wider knowledge have determined many of these forms vaguely classed under this one name to belong to the domain of the botanist; while those that remain have been more accurately classified as members of the animal world.

The simplest forms belong to the group which has received from its most distinguishing characteristic the name of rhizopod, or root-footed. In most respects their distinctive features are negative rather than positive. They possess not even the rudiments of a circulatory, muscular, or nervous system, and yet they live, move and feel after some feeble fashion. They possess no distinct cell wall, and yet some of them secrete shells of the most exquisite delicacy and beauty. They have no organs of prehension or motion, and yet they are able to improvise arms and legs whenever and wherever they are needed. They are entirely destitute of anything like a mouth or a stomach, and yet whenever food happens to be in the vicinity, and the tiny bit of jelly feels hungry, it extends in the direction of its prey a prolongation of its protoplasm, secures the food, pushes or sucks it into any part of its body nearest at hand, which closes over the food-material and digests it. If there happens to be associated with the nutritious matter anything indigestible, such as shell or skin, the useless matter is pushed toward the surface of its body, and excluded. In this inconceivably minute particle of mucilaginous matter, all the processes of life go on without the aid of organs or senses; it might almost be considered as a generalized statement of vitality on the very minutest scale. And still, simple as it is, in its expression, this is, beyond question, animal life; the substances taken up are organic, the mode of taking them up is digestion, not simple absorption.

The rhizopods are divided into three orders, the first two of which agree with the description just given. The last, however, is a little more highly organized. The protoplasmic prolongations—or pseudopodia (false feet) as they are called—give rise to the names bestowed upon the three orders—reticularia, radiolaria and loboso. The reticularia send out pseudopodia which coalesce wherever they come in contact, and thus form around the body an irregular net-work of delicate gelatinous threads, by means of which they crawl about and seize their food.

One of the most curious of this family is the *Gromia oviformis* [Fig. 2]. The little mass of jelly (for to all the tests, microscopical or chemical, which have been applied, it is essentially nothing more than this) is inclosed in an ovoid shell of a yellowish-brown color. At the smaller end there is an opening in the shell, through which the

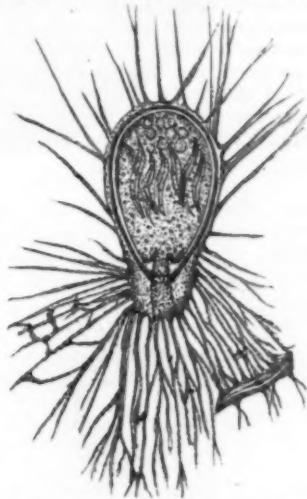


FIG. 2. *GROMIA OVIFORMIS* WITH PSEUDOPODIA EXTENDED SHOWING DIATOMS ENTANGLED AND ALSO INCLOSED IN THE BODY.

sarcode, as this animal jelly is called, is poured; the whole shell becomes invested in the protoplasm, and from it are sent out pseudopodia in every direction. These little creatures are found in fresh water, most commonly; but they are also inhabitants of the sea, and exist, in at least one variety, as an underground organism. Dr. Leidy discovered a number of fresh-water forms of life, such as rotifers and this *Gromia terricola*, in the cracks between the bricks of the Philadelphia pavements. His description

of the ordinary gromia is so very graphic, that it will not be out of place to give it in his own words. "Imagine," he says, "an animal like one of our autumnal spiders stationed at the center of its well-spread net; imagine this net to be a living extension of the animal, elongating, branching, and becoming confluent, so as to form a most intricate net, and imagine every thread to exhibit actively moving currents of a viscid liquid, both inward and outward, carrying along particles of food and dirt, and you have some idea of the general character of a gromia." The subterranean species are fresh-water organisms after all, for it is only when the soil between the paving-stones becomes wet that the little creature exhibits any signs of life; it then sends out its pseudopodia, forming its net for the capture of any food that may chance to be within reach. When the specimen described by Dr. Leidy was placed in water, the little spherical cream-colored body at once sent out multitudes of protoplasmic threads, and its net was soon satisfactorily spread. The space occupied was now sixty times the area which the body alone had covered, and along the threads of its intricate web numbers of navicula (the long, boat-shaped

radiolaria, so called from the radial arrangement of their pseudopodia. Like the reticularia, some of these possess shells, or spicules,—rigid needle-like spines,—while others are naked. A very curious form of this order is the *Acanthocystis turfacea*, which is found in boggy pools [Fig. 3]. It possesses a spherical body, which is surrounded by numerous long, rigid spines, and others of a shorter kind. The body is covered with an investment—lorica it is called—formed of multitudes of short curved spines, apparently matted together into a tough membrane: the manner in which they are united is not known. From among the spines the pseudopodia issue to about thrice the length of the longer spines. The body is loaded with chlorophyll cells, and seems to have no nucleus. The singular feature about it is, however, that within the interior mass of protoplasm are usually seen from one to three ova. It would naturally be supposed that this was merely a phase in the development of the creature; but close examination would indicate that it is not so. If the ova be three in number, as they grow the entire protoplasmic mass of the radiolarian becomes absorbed, or disappears. Finally, when one of the ova has matured, signs of life may be observed within its shell; the tiny creature, as it develops, shows itself a rotatorian—a form far higher in the scale of life than the organism within which it has developed. When ready to quit the egg, the little prisoner becomes restless and impatient of confinement. By repeatedly dashing its head against the walls of the ovum it breaks its way out, only to find itself still incarcerated in the spine-beset cavity of the acanthocystis. But obstacles disappear before the persistent energy of the tiny hero; by rushing headlong against its prison walls they also are demolished, and it is at last free. This rotifer is, to all appearance, a parasite, the eggs of which had been previously deposited in the body of the acanthocystis, at whose expense it has developed.

The *Raphidiophrys viridis* is probably the largest fresh-water radiolarian known to science [Fig. 4]. The body of the animal consists of a variable number of balls formed of pellucid sarcodae, about  $\frac{3}{16}$  of an inch in diameter. It possesses a definite outline and no nucleus. Under the external surface of each ball is to be seen a dense

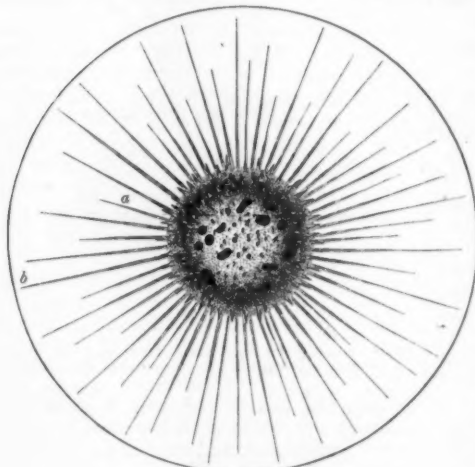


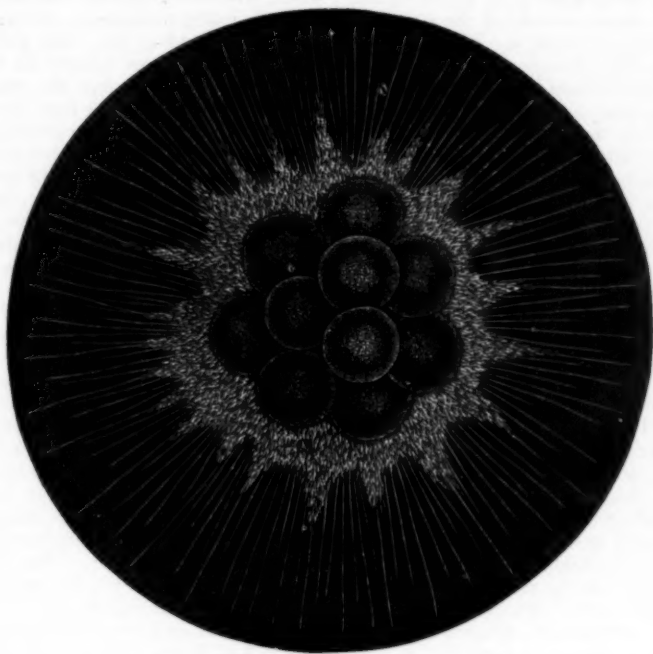
FIG. 3. ACANTHOCYSTIS TURFACEA.

a, Shorter spines; b, longer. (400 diam.) [Archer.]

diatoms which may be seen in Fig. 2, both within the shell and entangled in the pseudopodia) floated like tiny craft upon a stream of water, till they reached the opening of the shell, when they were engulfed.

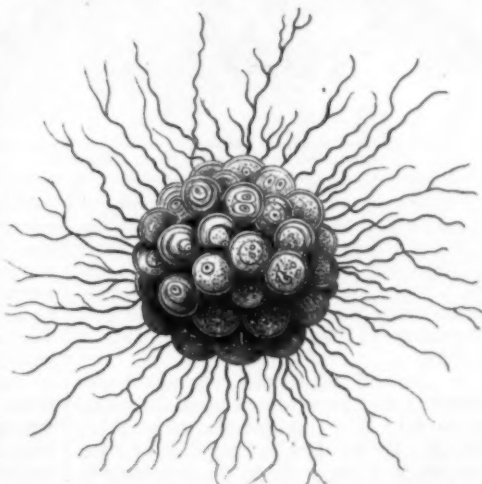
The second order of rhizopods are the

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FIG. 4. *RAPHYDOPHYRYS VIRIDIS*. [AFTER ARCHER.]

stratum of chlorophyll cells, the center of the globe being free from them. The balls number, generally, from six to eight, though very rarely a single ball is found, and as rarely a very large number. Around the definite figure into which these balls heap themselves is a common investment of a thinner buff-colored sarcoderm which is changeable in its character. Immersed in this investing jelly are innumerable multitudes of double-pointed spicules of silica, densely crowded and lying in all possible directions, like a loosely tumbled-up heap of needles; they never, however, penetrate the globes. From among this mass of spicules a number of perfectly straight, transparent pseudopodia proceed. At certain definite intervals the spicules heap themselves about one of these prolongations of the protoplasm, giving to the organism a symmetrical appearance; but whether these sarcoderm threads proceed from the balls or from the surrounding protoplasm, it is impossible to determine. The aggregation of spicules about the

pseudopodia seems to depend upon the movements of the sarcoderm. No currents are, however, to be seen, like those continually flowing to and fro along the reticulations of

FIG. 5. *CYSTOPHYRYS HAECKLIANA* BALLS SHOWING NUCLEI AND NUCLEOLI. [ARCHER.]

the gromia. In the figure [Fig. 4] the spicules which form an investment of the cluster of balls are not represented as covering the portion turned toward the eye. In a drawing it is impossible to represent them without obscuring the character and form of the sarcode globes. They are, in reality, not dense enough to obstruct completely the contour of the organism beneath, though around the edges, being seen through so great a thickness, they appear opaque.

The *Cystophrys haeckliana* is composed, like *R. viridis*, of a number of minute balls of protoplasm, but in several respects it manifests a higher degree of organism. It is destitute of hard parts, spicules or shell, but shows a distinct cell wall, and each ball has a nucleus and also a nucleolus, the first faint indications of a differentiation of parts. In the representation [Fig. 5] the nucleus cannot always be seen, owing to the position of the ball with reference to the eye of the observer, or else to the opacity of the granular matter around it. Frequently within the wall a division of the cell contents may be observed. [See Fig. 5, d.] The pseudopodia do not extend, as in the earlier forms of radiolaria, straight out radially, but branch irregularly and are thicker in certain portions than in others, and in some

when, however, it touched the woolen fiber, the balls rolled themselves over so as completely to envelop it. The pseudopodia stretched themselves toward its two ends, converging and clasping the thread with sufficient force to bend it from its normally straight position into a decided bow. The balls in some places were pushed quite outside the visible investment of protoplasm, but were never quite separated, and possibly were surrounded by a less tenacious protoplasmic envelope [Fig. 6]. Another variety of the cystophrys is much more lively in its motions. A freshly caught specimen has sometimes been seen to tear itself apart and become two individuals in the course of a few moments. This is not a case of multiplication by division of the ordinary or natural kind; in that case the cell contents usually show distinct division before the cell wall gives way, but here, without any previous change in the cell contents, a triangular cleft was to be seen in one margin of the ball, the two edges of which were still connected by protoplasmic threads extending across the gap. The cleft deepened and widened, till finally a complete severance was effected; for a little while fewer pseudopodia were extended along the edges, which had just separated from each other, but soon all distinction was lost.

The third order of radiolarians—the loboso—includes the form of animal life which most nearly represents the colorless corpuscles of the blood of vertebrate animals. The amebæ are minute masses of protoplasm having no definite form. They exist in almost all infusions, and abound in the slime which covers aquatic plants. When first

dropped upon a slide for examination, they are seen as small, rounded, semi-transparent masses of animal jelly; but soon from one part or another of the mass pointed extensions of its substance are seen extending, and finally the creature is seen to be advancing in that direction. [See Fig. 7.] The amebæ have distinct inclosing and inclosed portions, or ectosarc and endosarc, as they are called in animal organisms. Some of these minute creatures Meyen attempted to prove were single-celled animals; though this attempt was not successful, it is admitted that these tiny protoplasmic masses constitute independent living beings. The ectosarc, or skin, as it



FIG. 6. CYSTOPHRY HAECKLIANA.—BALLS AFTER THEY HAD SPREAD THEMSELVES ON A WOOLEN FIBER. [ARCHER.]

a, a, Ends of fiber; p, p, pseudopodia inclosing fiber and drawing it into a bow-shape.

cases they do not extend from all portions of the central mass. All these differences show an approximation to the third order of rhizopods—the lobosa. The cystophrys shows so distinctly animal characteristics that it has been selected, and two illustrations of the same form given. [Fig. 5 and Fig. 6.]

It chanced, when the specimen represented in Fig. 5 was placed upon the microscopic field, that a minute fiber of wool lay near it. By accident, or possibly by some movement of the creature, the two came in contact. The normal position of the balls is a cluster approaching a sphere in shape;

may be loosely denominated, is transparent; in the endosarc, which appears—like the primordial utricle of vegetable cells—to line

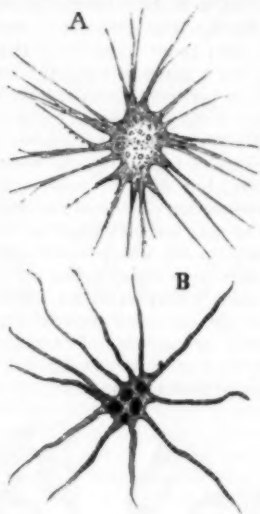


FIG. 7.

A, *Amœba porrecta*; B, White blood corpuscle. Walled. [Carpenter.]

rather than to fill the ectosarc, are found all the coloring matters of the organism, the central space being filled with a substance of a watery consistence filled with granules. A nucleus may be almost always seen in the amœba, adherent to the ectosarc, and lying within the internal cavity occupied by the protoplasmic contents; besides this, a contractile vesicle is forever pulsating like the heavings of rudimentary lungs. When the creature wishes to move, a portion of its investing wall extends itself like the finger of a glove, into which the granular contents pour themselves; by this means a definite portion, both of cell wall and cell contents, is transferred from some other portion of the body, and by a repetition of the process the whole animal conveys itself from place to place. The presence of a definite cell wall is manifest from the fact that the pseudopodia never coalesce when they meet, as in the lower forms. The movement of the amœba, which looks like rolling, is, more accurately speaking, creeping; for the nucleus and contractile vesicle never, during its progress, change their place with relation to the rest of the body. In moving about, the animal comes in contact with nutritious particles. These it

receives into any portion of its body, or of its lobose extensions, which happen to touch them—the investing membrane not being close enough to prevent the animals improvising a mouth wherever convenient. In the same simple way innutritious particles are pushed out anywhere. When one of these creatures comes near another animal whose movements are not swift enough to enable it to escape, the pseudopodia of the amœba embrace its victim, the processes close around it, and the whole captured organism is invested and held, until all its nutritious particles are abstracted. [Fig. 7, A, *Amœba princeps*.]

The sarcode which goes to make up the entity of this simple life was at first considered to be characteristic only of the humblest organisms; but later investigations have led slowly but surely to the conclusion that the organized matter of the tiniest animalcule which floats in our ponds is identical with the cell substance which constitutes our own vitality. In the mucous membrane which lines the mouth, throat, stomach and alimentary canal of the higher organisms, in the lymphatic glands, in the connective tissue, and in the blood which circulates through our systems, there exist minute masses of colorless protoplasm, which extend pseudopodia, and even in some

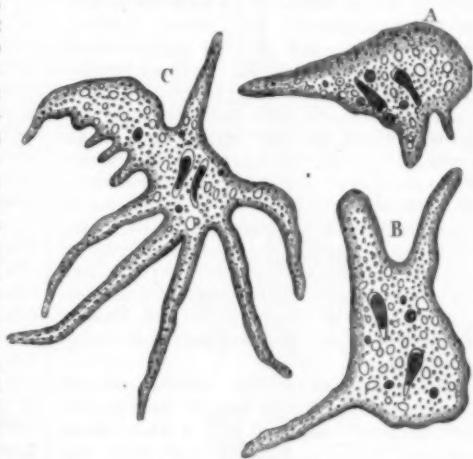


FIG. 8. AMŒBA PRINCEPS.

A, B, C, Successive forms assumed in the course of a few moments. [Carpenter.]

cases, migrate from place to place in a manner exactly similar to the movements of the amœba. These are no foreign intruders for which we should feel a natural horror and disgust, but probably the most



essential parts of our physical frame. In the human blood, these white blood corpuscles exist in the proportion of 1 to 350 of the red corpuscles. There is every reason to suppose that the red disks to which our blood owes its color and vital qualities are developed at the expense of the white amœbi-form cells. Investigations upon the circulation of a frog (which can be made



FIG. 9.  
STENTOR MÜLLERI.

upon the thin membrane joining its toes while the animal is in perfect health) show this to be the case with batrachians, and these white corpuscles while moving in the frog's veins have even been observed to devour the red ones as the amœbæ devour their prey. In the connective tissues of the human body these cells develop, and by means of their pseudopodia move about the body,—sometimes penetrating the walls of a blood-vessel, traversing the current of corpuscles and emerging on the opposite side.

There is something profoundly suggestive in these facts. It would seem that in the protoplasmic jelly, called sarcode, resides the mysterious vital power, whatever that may prove to be. In these humble organisms all the essential processes of life—such as growth, nutrition and reproduction—go on without the intervention of a single organ, while in the higher orders, where there are special organs for the performance of each function, the work is accomplished by each only in the presence or by means of living protoplasm. The reproduction of the species, the regeneration of the blood, the transmutation of food-material into organic tissue, is always, as is well known, dependent upon the existence of living protoplasm.

A comparison of the *Amœba porrecta* (which, by the way, is one of the very few non-nucleated amœbæ) and a white blood corpuscle [Fig. 7, A and B] will show how striking is the resemblance between them when stationary, but the resemblance reaches far deeper than that of mere form—it is a resemblance of chemical constitution and vital function.

Above the rhizopods in the scale of being is a wonderful and beautiful group

of microscopic animals, to which has been especially appropriated the once general name of infusoria. Their bodies consist of sarcode, but a higher differentiation begins to show itself. The ectosarc is more firm, and the form more fixed than that of the amœbæ. As a general thing, the body does not seem to possess much contractile power, but in the vorticella [Figs. 10 and 11] the power of contraction is very great. Different members of this group are widely different in form, but they all possess, as organs of prehension and locomotion, numbers of cilia or delicate lashes formed of the protoplasm, which are not pushed out and retracted like pseudopodia, but are constant, and by their vibration create currents that carry into the creatures' mouths small living animalculæ, or particles of nutritive matter. In the species of vorticella figured, the cilia are arranged about the mouth only, as well as



FIG. 10. BRANCH OF VORTICELLA FORMED BY FISSION.

in *Stentor mülleri* [Fig. 9]. It is possible, but hardly probable, that the movements of these cilia may be voluntary, since we know that in our own bodies ciliary movements, which are beyond our control or consciousness, are forever going on; and also that the movements of the unicellular plants and swarm-spores are all accomplished by the

lashings of these tiny whips, which cannot, of course, be considered as voluntary movements. "We can only regard it," Carpenter says, "as indicative of a wonderful adaptation on the part of these simple organisms,

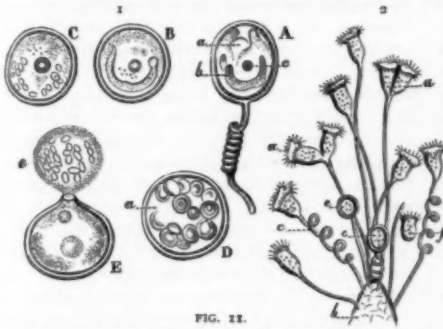


FIG. 11.  
1, Development of vorticella; A, B, C, D, E, successive stages; a, cluster of vorticellae; a, a, in division; b, base; c, coiled stem; e, e, encysted vorticella; f, floating bell, just freed from stem. [Carpenter.]

which enables them to go in quest of their own nutriment, and to introduce it when obtained into the interior of their own bodies." The stalks of the bell-shaped vorticella and stentor [see Figs. 9, 10, 11] enable them to attach themselves to any aquatic plants, and the smallest fragment of leaf or stalk can scarcely be placed under the microscope without bringing one or more of these beautiful creatures into view. A grain or two of carmine tinging the water shows the constant current created by the ciliary action, but the cilia themselves cannot be seen except when the motion is slackening. After tinging the water in which myriads of darting dots of structureless jelly seem to be glancing about, the colored liquid may be withdrawn, and clear water substituted by means of a drop-tube. All the minute creatures are then seen to have filled themselves with cochineal, and the capture of its prey may readily be observed in the vorticella; a small blot of red jelly seems struggling to stem the current which sets in toward the stomach of the vorticella; at last fate is too much for the struggling mite, it succumbs and is seen engulfed in the vortex. While watching it, any sudden jar to the microscopic stage causes the bell-shaped body to be jerked down by the sudden spiral coiling of its stem, which, however, soon relaxes again [Fig. 11, c]. The vorticella, though essentially animal, is reproduced exactly in the same manner as the protococcus ["Single-celled Plants," SCRIBNER for Dec., 1876],—either by a division of the individual into

two, or by conjugation. When fission occurs [Fig. 11, a] one of the divisions is usually smaller than the other; sometimes it detaches itself from the original bell and floats away [f], developing, after a while, a stem of its own, which becomes attached to some foreign body. At other times the fission extends down the stalk and they remain united; in this way a branching plant-like form develops [Figs. 9 and 11]. The vorticella has of late been very closely watched, and many cases of apparent fission are proved to be, in reality, conjugation,—two individuals becoming fused into one, and thus beginning a new cycle of asexual generation, by a true conjugation [Fig. 12].

Like protococcus, the vorticella has a still and a motile form. At certain times the creature becomes encysted and passes through the successive stages seen in Fig. 11, 1, A, D, till gemmules are set free, E, e. This is a process not unlike the pupa development of insects, or the hibernation of higher animals, and is in many cases a provision for their preservation through seasons when their ordinary life would be impossible. Sometimes it seems to be subservient to reproduction, sometimes to transformation, and sometimes only to individual preservation.

During the encysted state, the animal



FIG. 12.  
c, Conjugation of vorticella. [Carpenter.]

may be dried up till it is apparently mere dust, or it may be subjected to heat far beyond boiling-point, and still revive when

the appropriate conditions of moisture and food are supplied. In this way the air we breathe is full of the spores and zoöspores of vegetable and animal life, which make their appearance in infusions, stagnant water, animal organisms, or wherever else they can live.

Among the most beautiful of fresh-water organisms are the rotifers, which are far more highly organized than the infusoria.



FIG. 13. THE BEAUTIFUL FLOSCULE. [PRITCHARD.]

[See Fig. 13.] The internal structure of these minute beings is exquisitely delicate and complicated. Some forms—the *Rotifer vulgaris*, for instance—move about or attach themselves by means of a tail, which shoots out telescope-fashion, each tube being terminated by a fork, which prevents their sliding quite into one another when withdrawn. One moment the creature looks like a roundish mass of glass of a very imperfect quality, the next the tail is shot out by a series of jerks, and a couple of wheels edged with cilia set a-whirling to all appearance at the head-end, though the motion is in reality

not a continuous revolution. These movements are so lively that it is almost impossible to keep them in view under the glass. The masticating apparatus in the females is a most wonderful and complex organ; but in all the cases known the males possess none at all. They seem, like the drones among the bees, to be very short-lived, and they depend during that brief time upon such aliment as had been stored up in the egg. Like the infusoria, the rotifers may be dried up and wafted from place to place, awaiting favorable conditions for revivification. Naturalists are in the habit of keeping by them for convenience a stock of dried rotifers,—rotifer-powder,—which can be converted into the living forms, by soaking, whenever they are needed.

Some of the rotifers, as well as some of the infusoria, have a case, or lorica, into which they can withdraw. [See Fig. 13, 4, and also for the infusorial lorica, 9, 2.] In certain varieties the case is formed by the hardening of a gelatinous secretion thrown off in rings from the animal's surface. The indication of this mode of formation often shows itself by a series of constrictions in the tube. *Meliceria*, one of the rotifers, possesses a lorica formed of littlerounded pellets, evidently glued together. The method of its construction has been carefully observed by Mr. Gosse, and is so curious that we will conclude by describing the process. Beneath a projection of the head is a small organ, which, when the ciliated wheels are in motion, looks like a revolving ventilator. Toward this organ most of the solid particles caught in the vortex are carried, and after a time, molded into a globular pellet. At the end of about three minutes the tiny sphere has reached the correct size, and the animal then bends over its head and deposits the pellet. One by one the stones—of which the investing case is made—are thus formed and placed, till the cylindrical lorica is complete.

There is something so marvelously like the choice of adequate means to attain a definite purpose, in such manifestations as this,—which is not at all an exceptional one in the very humblest region of animal existence,—that one is tempted to believe that wonders increase, rather than decrease, as we go downward in the scale of being. Assuredly, the problem of life does grow more marvelous, more utterly inexplicable, as it is cleared of unnecessary terms and reduced to its simplest form.

## CROTON WATER.



SECTION OF THE CROTON AQUEDUCT SHOWING MANNER OF INSPECTING.

## I. THE CROTON WATER-SHED.

SIXTY or seventy miles from New York City, beyond the farming suburbs whose white villas and embryo avenues are knit together by the iron thread of the Harlem Railroad, is a picturesque country, embracing a large part of Putnam, a smaller part of Westchester, and a corner of Dutchess County. This area, with a bit of Connecticut added to it, is bespangled with twenty-three very pretty lakes, which, with many springs and brooks, yield the clear and wholesome water whose superabundance has made the name of Croton blessed in every New York household.

The principal lake in the group is Mahopac, which is both the largest and the most beautiful. It is from two and a half to three miles in diameter,—nearly eight miles in circumference,—from 40 to 50 feet deep on an average, and covers a superficial area of 603 acres. To speak of its shores as being luxuriously wooded is not enough. They are buried in leaf, soft and lustrous, which not only reaches to the water's edge but overlaps it, and casts tremulous shadows over the transparent depths. Where there is an open space it is either a lawn or a pasture, and the boulders of gneiss that are so prominent in the surrounding country almost disappear.

About five miles northward from Maho-

pac, by a hilly road, which descends from a height of 650 feet to a height of 495 feet, is Lake Gleneida, upon the northern side of which is situated the village of Carmel. Gleneida is over 100 feet deep in many places, and is about a mile long and half a mile wide. The banks are high, but they have been cleared of wood and, taken, all in all, the lake is not as pretty as Mahopac. Its shores are smooth and regular, and many attractive dwellings are built upon them. The water is as clear as crystal, and repeats in its depths the clustering white and red houses of the village, and the large female college that stands on the bluff to the right.

A mile east of Gleneida is another beautiful lake—Gilead—which has an area of 122 acres, and is situated 498 feet above the level of the sea. The wonder is that no hotel or boarding-house has sprung up here. The banks slope down precipitously from a height of several hundred feet, and the foliage is intertwined in every direction with bewildering density.

There are twenty other lakes in the group, including Barrett Pond, China Pond, and Pine Pond, all near Carmel, and varying in altitude from six to eight hundred feet; Long Pond, Dean Pond and White Pond,—the latter being the loftiest of the Putnam

County lakes, 826 feet above the tide,—Black Pond, Tonetta Pond, Ice Pond and Peach Pond. Lake Waccabuc is locked in a secluded vale with high, romantic cliffs, four

stream, the Croton, after many windings and turnings, mingles its freshness with the salt of the Hudson near Teller's Point, forty miles north of New York City.



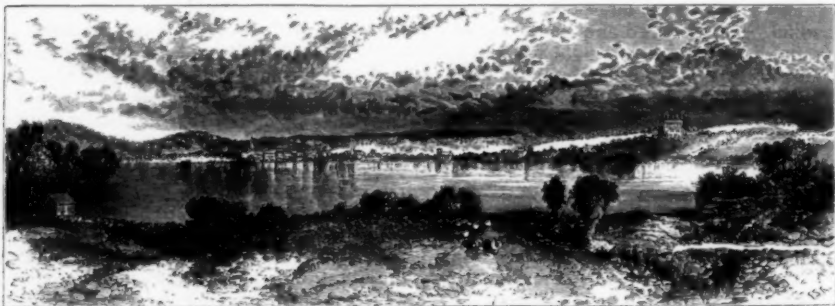
LAKE MAHOPAC.

miles from Golden's Bridge station, and is much visited in the summer by pleasure-seekers. These basins, then, with a few others less important whose names I have not given, form the natural reservoirs of the Croton water-shed, and can all be diverted into one broad stream should occasion require, though at present the only ones likely to be drawn upon are the three largest. The whole shed embraces an area of about 220,000 acres, with a drainage of 339 square miles. But the lakes, useful as they are for storage, do not serve as well for a water supply as a perpetual, brisk-flowing river,—and such a river is the Croton. It has its source in three springs in Putnam County; the three separate rivulets from these springs—east, west and middle branches—unite near Owentown, and are increased by the surplus of the lakes, and the confluence of the small brooks which enter from both sides, and, as one fine

The geological features of the watershed may be summed up as follows: The predominant rock of the country is gneiss,—a continuation of the formation which gives New England its backbone,—and its quality varies from the hardest granite to a loose mica-slate. On the surface there are various impressions, in some of which large masses of white marble are deposited, and the gneiss stratification shows clear signs of some very violent revolutions. The gneiss is exposed in some places, or is covered as high as 50 feet with diluvium and alluvium, mixed with boulders of granite and trap.

#### II. AN ABSTRACT OF HISTORY.

THE contiguity of this abundant watershed to the growing city on Manhattan Island, forty miles south of Teller's Point, did not enter into the consideration of the early settlers, who, with the sea around them and sufficient for the day in the wells

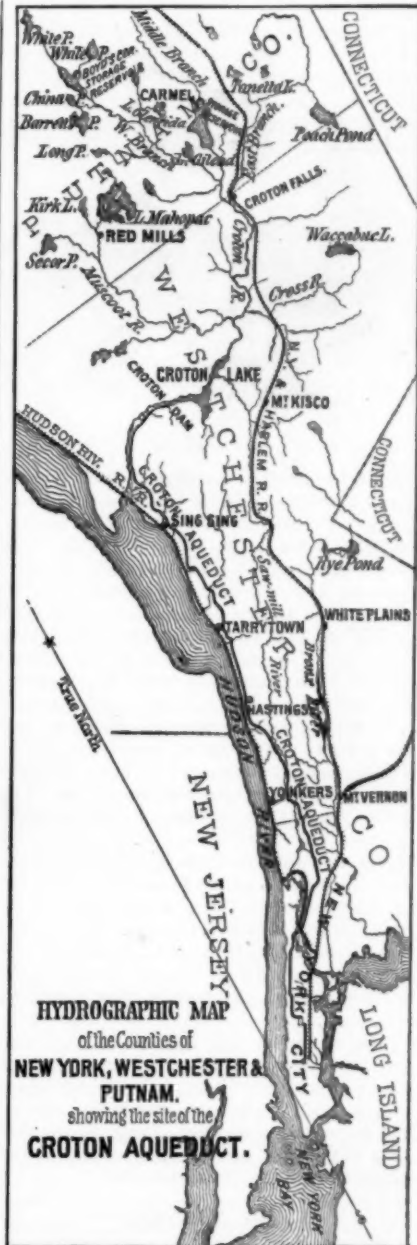


LAKE GLENEIDA.



attached to their dwellings, never dreamed to what an extent their numbers would increase, nor realized how all the wells, ponds and brooks in their little circle, multiplied ten times ten, would eventually prove inadequate to the demand. It was not until 1774 that the subject of obtaining a supply by artificial means was thought of, and the outbreak of the Revolution then deferred its practical embodiment for several years.

But in 1798 the population had already increased so largely that it was resolved to obtain a supply from Westchester County. Various plans were proposed and none was accepted; engineers held councils, and sanitarians wrote reports; experiments in the way of artesian wells, etc., were made and abandoned in their incipency, and thirty years went by in dilly-dallying with the subject. Among the plans was one to conduct water from Rye ponds by a pipe 28 inches in diameter, at an expense of \$2,600,000; another was to draw water from the Passaic, above Paterson Falls, and send it underneath the Hudson in iron pipes; and a third, suggested by the author of the previous two, Mr. Francis Phelps, looked to the Croton River and proposed to bring it to the city at an expense of \$3,060,000. This, according to T. Schramke, in his "Description of the Croton Aqueduct," was the first time the Croton River was mentioned, and to Mr. Phelps, therefore, belongs the honor of discovering the adaptability of this river and its environs. The plan relating to Rye ponds was accepted by those having the matter in charge, and it was decided to build an arched canal six feet wide from the ponds to Macomb's Dam, where, by an arrangement of tidal power, the water was to be lifted 120 feet above the level of the sea, and thence conducted across the Harlem River to the island. But when it came to the legislature, this was vetoed, and the work still remained in abeyance. In 1834, a committee of water commissioners was appointed, consisting of Stephen Allen, Benjamin Brown, Thomas Woodruff, Charles Dusenbury, Saul Alley and W. W. Fox, and these commissioners, with Major Douglass, professor of engineering at West Point, unanimously concluded that the only two streams suitable were the Croton and the Bronx. In the meantime another chimera was broached. This was to dam the Hudson, so as to raise that river two feet above flood tide and cut off the sea-water. By the fall of eight feet thus produced, it was said that a water-power of 30,000 horses would



be made available, 27 parts of which might be devoted to manufacturing purposes, and the other 3,000 for pumping the water. The



JOHN B. JERVIS.

author, Bradford Seymour, proposed to construct a system of locks for the use of shipping, but the interests of free navigation and the fisheries, the fear that salt water would penetrate the dam, and the enormous estimate of cost, combined to defeat the plan. One of the propositions submitted by Major Douglass was accepted, and that was the real beginning of the Croton Aqueduct and the system by which the metropolis receives its bountiful supply of water. Under his direction every preparation was made for the execution of the design, when a disagreement between him and the chairman of the water commissioners resulted in his resignation, and the transfer of his duties as chief engineer to John B. Jervis, under whom the work in its original proportions was carried on, to be afterward extended by the building of the new and high-service reservoirs by Alfred W. Craven. Mr. Craven was succeeded by General G. S. Greene, and Mr. Greene by E. H. Tracy, and Mr. Tracy by the present engineer-in-chief, John C. Campbell.

The aqueduct was finished in 1842, and the first water was admitted on the 4th of July in that year. Thus, after many delays and many experiments, was raised one of the grandest monuments of engineering skill that the world, even at the mature age of nineteen centuries, has ever seen.

### III. THE DAM.

The starting-point of the aqueduct is about six miles above the mouth of the Croton River and 35 miles north of Central Park. But before we follow it on its course toward

the city, let us see how the water is diverted from its natural channel.

Nourished by lakes, brooks, and springs, as I have already stated, the three forks of the river unite near Owentown, and pass thence into an extensive sedimentary basin known as Croton Lake. The artist and the writer drove around this beautiful expanse of water one delightful morning last July. High hills encompass it, wooded from the crest to the foot; winding roads, overhung with foliage, edge it, and monotony is taken away from it by an irregular shore, and islands strewn like emerald stepping-stones across its breadth.



JOHN C. CAMPBELL.

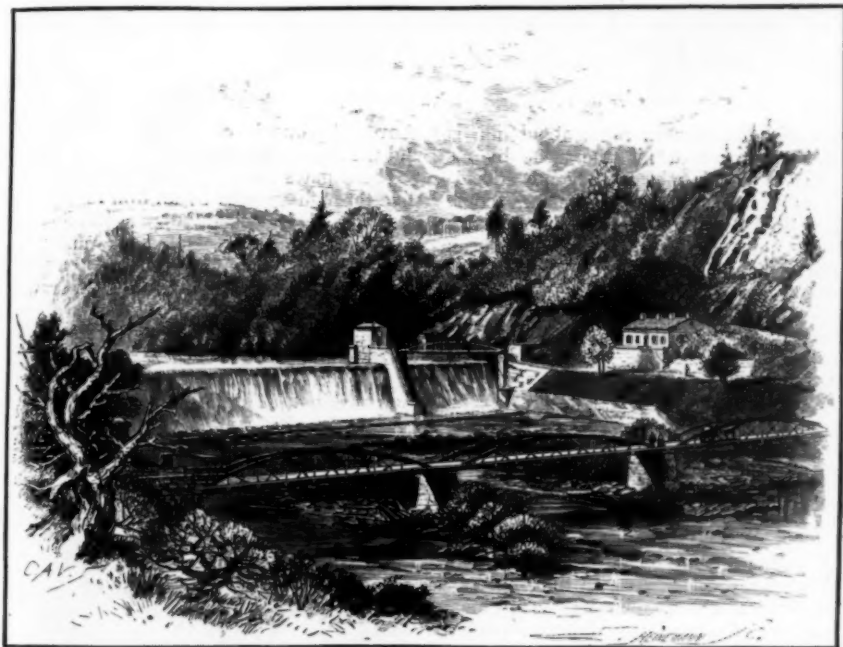
The lake is about six miles long, from one-eighth to a third of a mile wide, and embraces 400 acres, with a retaining capacity of about 500,000,000 gallons. Toward the



ALFRED W. CRAVEN.

south-western end the space between the hills is narrow, and here is constructed the dam, 230 feet wide and 45 feet high, which raises the water 40 feet above its original level, and turns it into the aqueduct for city use instead of allowing it to flow farther along its natural course into the Hudson. The appearance of this immense belt of masonry—the visible parts of the dam being of solid granite—in the midst of the hills

family can scarcely sleep for it; the overflow is occasionally five feet high, and the hills catch up the roar and repeat it in rumbling echoes, which can be heard a long way off." The curved face is built of large and closely cut stone, with four heavy courses at the bottom dovetailed together, and the main body of the work is of rough granite. Three hundred feet from the lower edge of the dam—as the unscientific reader would call it, or the



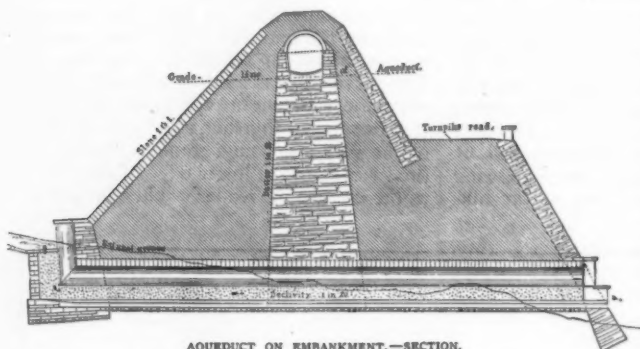
VIEW OF CROTON LAKE AND DAM.

puts man's achievements in contrast with nature's, and makes a strong impression on the observer.

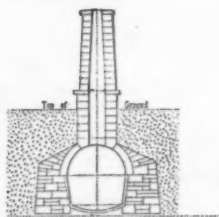
The lower or front face of the dam curves by a radius of 55 feet to within 10 feet of the top, when a reversed curve completes it. The upper or rear face—that against which the water of the lake presses—is vertical, and is backed by an embankment of earth extending 275 feet into the lake with a slope of one foot in five. The surplus water passes over this in a white avalanche, and is carried off into the Hudson by the old course of the Croton. The thunder of the fall in times of spring freshets is described by the keeper of the dam as deafening. "The members of my

"lip," as it is known to engineers—a secondary dam of timber and stone, inconsiderable in height, is erected to break the body of water, and a pool forms, which may be emptied by a waste-wier placed near the left bank.

The grounds near the dam are set off with flower-beds and patches of neatly trimmed grass, which are kept in order by old Henry Munyers, who, for nearly a quarter of a century, has been a devoted servant of the department. Henry is not a very presentable object personally. His face is blue with a gunpowder wound received in an unfortunate blasting operation, and his eyesight is almost gone. But he loves his work, and does it faithfully.



Another uncommon thing about him is that he is taken at his true value by his superiors, and is placed beyond adverse political influence. Politicians may come and politicians may go, but Henry is a life incumbent; indeed, they say it would break his heart to remove him.



A path from the edge of the dam—over which on the day of my visit thin sheets of glistening water were falling—leads to a bluff, at the foot of which is a pediment of granite giving the names of the engineers, contractors and builders who had to do with the construction of the aqueduct. The entrance to the aqueduct is here, and an iron grating reveals a stream of water bubbling and eddying underneath as it passes in through a tunnel beneath the surface. A wooden frame-work and a wire screen extending outward from the pier into the lake keeps out floating leaves, etc., for the engineers are very particular as to cleanliness, and a drain runs underneath the dam to give the sediment an exit.

The tunnel is cut through 180 feet of solid rock, and ends at a gate-house where a series of gates regulate the quantity of water admitted to the aqueduct. It would not do to let the water flow in at hap-hazard, of course; that would soon result in the burst-

ing of the strongest masonry, and in rainy seasons the gates require constant attention.

A little way west of the dam in the grounds surrounding the keeper's house, is a small building covering an opening to the aqueduct, where, with a gauge and lantern, old Munyers is placed on watch during stormy nights, and when the water rises

above the proper level, the gates are lowered and the supply is reduced.

These gates are of iron, and are made to slide through grooves by an iron rod. The latter has a screw at the upper end, and by turning a wheel-like key, it is raised or lowered. The gate-way—all the masonry of which consists of gneiss and hydraulic mortar—is inclosed in a granite house, and the interior of this building—with its white-washed walls, rows of brightly polished screws, and the rushing water below—is very striking. The Croton is now on its way to the city, with a current of two and a quarter miles an hour.



NIGHTLY GAUGING OF WATER IN THE AQUEDUCT AT CROTON DAM.

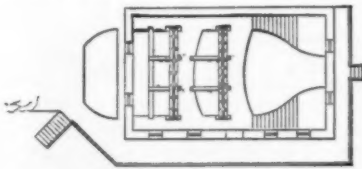
## IV. THE AQUEDUCT.

At first it was proposed to conduct the water through an open canal, but this plan met with many objections. The water would be exposed to the sun, the wading of cattle, and bathing, and bowlders; earth and stone would be washed in. A wooden roof was then discussed, but as wood was not sufficiently impervious to heat and cold, it was finally resolved to arch the channel with stone, notwithstanding the enormous expense. The original cost of the aqueduct was \$8,575,000, which included the purchase of land, water-rights, and some unfinished work, but not the reservoirs and distributing-pipes. This amount fell within five per cent. of the estimate made by Chief-engineer Jervis.

The form of the aqueduct is an inverted arch at the bottom, with a span-line of six feet nine inches, and the side walls rise four feet above the spring-line of the arch, with a bevel of one inch to a foot, by which the width at the top of the side wall is brought



QUAKER HILL, NEAR THE SOURCE OF THE EAST BRANCH OF THE CROTON RIVER.

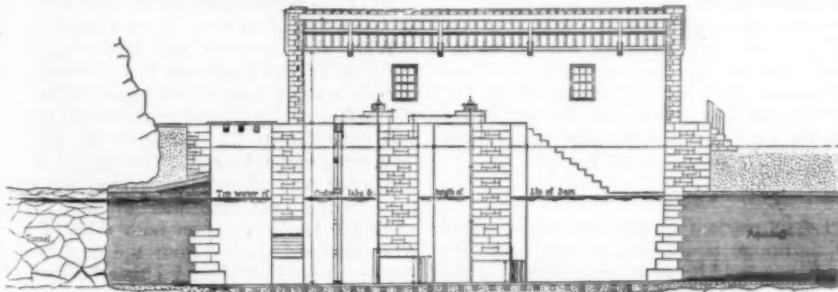


GATE-HOUSE AT CROTON DAM.—PLAN.

to seven feet five inches—the greatest breadth in any part. The greatest height is eight feet five and a half inches. Where a tunnel has been excavated, the foundation is of concrete masonry, which is laid level across the bottom. The inverted arch is of brick, four inches thick, and the roofing arch is also of brick, eight inches thick. The side walls are of rubble stone with a brick facing four inches thick. The concrete masonry was formed by mixing one part of

hydraulic cement, three parts of clear sand, and three parts of fine broken stone, and the mortar for the stone-work was composed of one measure of cement and three parts of sand. The mortar for the bricks and plastering consists of one part of cement and two parts of sand. To pass the streams that intersect the line, 114 culverts were constructed, the span of which varies from one and a half to 25 feet; and to admit a free current of air, 33 chimney-like ventilators were placed at intervals of one mile. The fall or grade is about 1.1088 feet per mile.

Having left the gate-way at the dam, the aqueduct follows the left bank of the Croton River for five miles, and thence turns south, penetrating two hills of solid rock by a tunnel 720 feet long. Half a mile further is another tunnel 276 feet long, and ravine after ravine is spanned and passed. At

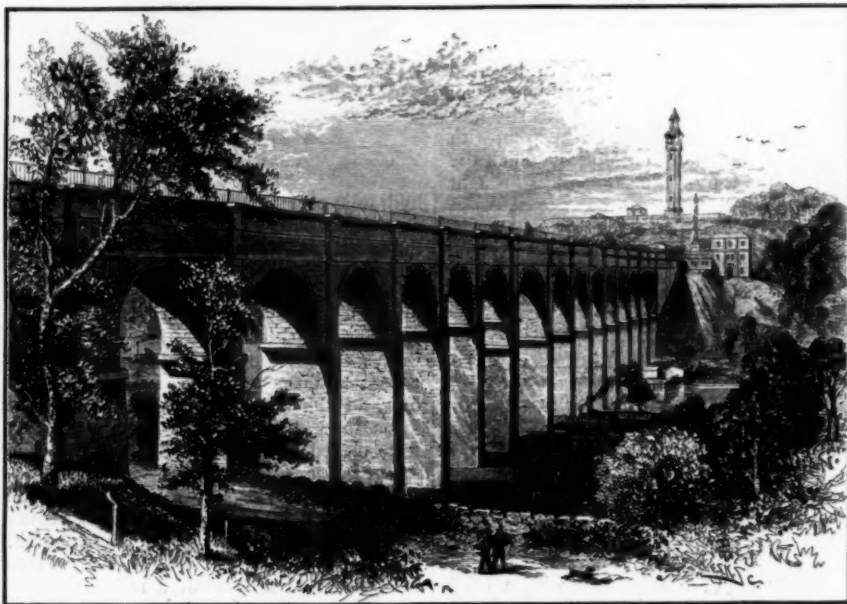


GATE-HOUSE AT CROTON DAM.—VERTICAL SECTION.



Sing Sing the Kill River is crossed by an arch 88 feet wide, the abutment walls of which are 20 feet thick, resting on a solid rock foundation, and two other tunnels intersect the grounds of the state prison for a distance of 416 and 375 feet respectively. At Mill River, 13 miles from the dam, the crossing work is very imposing. The aqueduct is carried over Sleepy Hollow in the rear of the old Dutch church, by a massive embankment of stone and earth, 87 feet high, 25 wide, and 172 feet long, and in the next two miles five valleys are crossed in succession. At Yonkers it passes through a tunnel driven partly through earth and partly

a few minutes' ride of the Grand Central Depot, or an hour's sail in the East River steamers from Peck Slip. On Sundays it is flocked with excursionists—principally workmen with their wives and children in holiday dress—of whom it is a favorite promenade. The banks on both sides of it are, in places, over 200 feet above the level of the water, shaded by hemlocks and willows, and sprinkled with beer-gardens. Rocks, that once were picturesque, project themselves in boulders and cliffs, disfigured, alas! by the glaring advertisements of all sorts of swindling nostrums; in fact from the crest to the shore the banks are a solid



HIGH BRIDGE.

through rock, 684 feet long, and thence it spans the Saw-mill River by a bridge of two arches, each measuring 25 feet in width. Tibbets Brook tunnel, below Yonkers, is thus far the most extensive excavation of all, being 810 feet long, and a short distance below this the aqueduct is borne over the Harlem River by the famous High Bridge.

#### V. THE HIGH BRIDGE.

EVERY resident of the city knows where High Bridge is, no matter how dense his ignorance may be as to other points of the water-service. It is one of the most popular resorts of the middle classes, and is within

mass of the pertinacious gneiss, and there is evidence that they were at one time united.

When the aqueduct was first proposed, the plan of the engineers was to carry the conduit water through iron pipes, following the surface of the ground to the river's edge, and extending to the middle of the stream by a stone embankment. The execution of this work was already contracted for and the dredging-machine was in operation, when the land-owners on both sides of the river obtained a law from the legislature that the aqueduct should either be carried along the bottom of the river, or above its surface at such a height that arches 80 feet

wide and 100 feet high could be made in it to allow vessels a safe passage. The latter method was adopted, although it cost \$200,000 more than the former would have cost. The bridge has 15 arches, eight of which, each 100 feet in height above the tide and 80 feet wide, rise out of the stream, while the other seven rise from either shore, with a span of 50 feet each. Its whole length is 1,450 feet, and the principal material is well-dressed granite. The width across the top, which is protected by a parapet on each side, is 21 feet, and between the parapets the water is conveyed by an immense pipe, seven feet six inches in diameter.\* The object in using pipes was to secure the conduit against damage from leakage and the action of frost. The width of the river at the crossing is 620 feet, and its bed is formed by stratas of sand and large boulders intermixed, and compact marble or clay and sand. The foundations of all the land piers, except two, have been put down with bearing piles to support them, and there are seven piers in the river with foundations of considerable depth.

At the northern end of the bridge stands a gate-house like that at the dam, into which the water that has been gathered from the lovely springs, lakes and rivulets in Westchester and Putnam, and has traveled 33 miles through the aqueduct, pours in a black and sometimes frothy mass. The system of gates is also the same as that of the dam, and all the other gate-houses, its object being to shut off or regulate the supply of water in the pipes over the bridge. Passing through these gates, the water is, or rather may be, conveyed over the bridge in two cast-iron pipes three feet in diameter, and one wrought iron pipe seven feet six inches in diameter, and half an inch thick, which are inclosed, the roof over them forming the promenade from bank to bank of the river. A path from the gate-house down a grassy embankment leads to this tunnel, and the effect of the enormous whitened pipes, stretching out in diminishing perspective between the narrow walls, is very peculiar. The pipes rest on iron pedestals with stone foundations. The heat expands them as much as five inches in summer, and they are contracted by the cold proportionately in winter.

\* Mr. Jervis originally put down two pipes each three feet diameter, but when Mr. Craven raised and altered the bridge he put down the one large pipe and the others are not now in use.

At the south end of the bridge there is another gate-house, and thence the aqueduct is resumed. But a part of the water is diverted into a high service reservoir by powerful engines which throw up 100,000 gallons in every 24 hours, for the use of houses on the elevated ground in the vicinity of Carmansville. By the side of this reservoir is a handsome tower of granite masonry, the top of which is nearly 400 feet above the level of the river, and the water is pumped in to give it sufficient head to supply the heights of Fort Washington. The additions to the High Bridge and the



PAT. McCLUSKIE.

large wrought-iron pipe over it, the pumping works, high service reservoir and tower, were constructed under A. W. Craven as chief-engineer, G. S. Greene and W. L. Dearborn, engineers in charge. These gentlemen also built the new reservoir in Central Park.

The views from the windows are of surpassing beauty, revealing the Hudson reaching north and south between the Palisades, and into the Tappan Zee; Long Island

Sound flashing in the east; the smoky city with its spires and roofs below, and the soft green pastures and woods of Westchester County undulating into the northward haze. The line of the Harlem, speckled with row-boats, sloops, schooners, and little steamers; the red brick-paved walk across the top of the bridge dotted with pigmy

whose wealth caused the famous will case. It is hardly out of this when another obstacle appears in two ravines, one 38 feet deep, and the other 43 feet deep, which are successively bridged over, and thence it follows the line of the Tenth avenue to Manhattanville, and is hidden again under the Manhattan tunnel, which is cut through 1,215 feet of solid rock. At Tenth avenue and 110th street, there is a gate-house, passing which the water is conveyed in pipes to Ninety-third street between Ninth and Tenth avenues, where it flows through another gate-house into a new section of the aqueduct, which conveys it to, and discharges it in, the two large receiving reservoirs at Central Park.

#### VI. THE RESERVOIRS.

THE smaller of the reservoirs was built at the same time as the aqueduct, and the larger one is a more recent construction. The former covers an area of 35 acres, with a water surface of 31 acres, and a capacity of 150,000,000 gallons. The latter covers an area of 106 acres, with a water surface of 96 acres, and a capacity of 1,029,888,000 gallons. Its depth when full is 38 feet. A comprehensive view of both is obtained from the turrets of the belvedere in the Central Park, from which, on a sunny day, they appear to be sheets of burnished silver,—a simile which will be appreciated for its accuracy rather than for its novelty.

There is another reservoir between Fifth and Sixth avenues and Fortieth and Forty-second streets, which has a water surface of 386 square feet, and a depth when full of 38 feet, with a capacity of 21,000,000 imperial gallons.

The new reservoir at Central Park is divided by a wall, so that in case of an accident only one section of the basin need be emptied, and the system of gates is more elaborate, of course, than at any other part of the aqueduct. The influent gate-house at the northern end of the reservoir distributes the water equally into each section, or into one section only as may be required; and the effluent gate-house at the southern end can also draw a supply either from one



VIEW OF THE HARLEM RIVER FROM WINDOW OF TOWER, HIGH BRIDGE.

men and women, and the white houses, half hidden among the foliage on the banks, give a charming variety to the scene.

Another reservoir, near that used for the high service, receives a supply of water for Harlem and the up-town suburbs.

The aqueduct in its southerly course next crosses a ravine 30 feet deep, and a little further on it is buried in a tunnel 234 feet long, bored through solid rock, in the estate of Monsieur Etienne Jumel, the division of



CENTRAL PARK RESERVOIR, VIEW FROM BELVEDERE.

or both sections. The gate-houses and the waste-wiers are, by the way, the safety-valves of the whole work. But for them a slight leakage in any part of the dam, the aqueduct, or the reservoirs, would cripple the entire service: with them

the engineers are enabled to localize the injury as a physician might localize a disease.

There is an admirable neatness in the manner with which all the appurtenances are kept. In all the gate-houses and waste-wiers every bit of brass and steel work is as bright as a new pin; every bit of sod on the line of the aqueduct is trimmed like an English gentleman's lawn, and the water, take up a glass of it where you will, is nearly as clear as when it came out of the spring. The south gate-house in Central Park is an exemplification of this. From the roof to the foundation; from the walls to the floor; from the benches provided for inquisitive visitors who want to rest their legs and their curiosity, to the policeman in charge, the most exacting housekeeper might search in vain for a particle of dust. And the scrupulous cleanliness to be seen on the ground-floor of the gate-house is repeated in the tunnels far below, through which the water issues from the reservoir for distribution in the city.

We descend by a spiral stair-way placed in a circular well with moist, dripping walls, to a whitewashed chamber lighted for our own particular benefit by several gas jets. Our

attendant is a one-legged pensioner of the late war, a son of Erin, with the inevitable name of Pat. Pat is like old Munyers at the dam in his devotion to his work, and shows us about with evident pride. Here are the great forty-eight inch mains leading from the reservoir into the city, with long rows of blow-off valves, stop-cocks, and ventilators, iron wheels and brass screws. The "blow-offs" are used for driving the water out of the pipes into the sewers when repairs have to be made. The gates are raised or lowered by horizontal wheels working on screws two or three inches in diameter.

From the gallery, where the stop-cocks are, Pat, carrying a brilliant torch, now leads us into a wide tunnel, stalking over the pipes on his wooden leg with greater security than we do. The tunnel curves toward the Eighty-fifth street entrance to the Park, and the six mains running along its bottom gradually sink into the ground until they are buried completely. One pipe extends to First avenue, another to Third avenue, another to Madison avenue, and so on, and thus the water is conveyed from the reservoirs by a marvelous system of pipes into nearly every building in the city. The branchings and crossings are made by single or double sleeves cast together with a main piece. At the corners of streets where these crossings and branches occur, stop-cocks are inserted in the pipes so that the water may be cut off from any districts in which repairs have to be made. The small pipes running from the mains into the houses are from half an inch to one inch in diameter and are made of lead. Hydrants are placed along the streets at convenient distances, and are protected by a cast-iron case, to keep off frost. In the harbor, pipes are also extended

along the piers to supply shipping; the privilege of which is let out to a contractor, who fixes his own price for the commodity.

#### VII. AN ENGINEER'S ADVENTURES.

ONCE a year, or oftener, usually in November, an exploration is made of the



GALLERY OF STOP-COCKS, BLOW-OFFS, ETC.

interior of the aqueduct from end to end, by Mr. Benjamin S. Church, the resident engineer, who for over twenty years has been in charge of this part of the work. The water is shut off at the Croton dam, and the aqueduct is emptied by the wastewaters which I have described. Many strange and exciting adventures befall the men detailed for this service; and though but one life has ever been lost, large parties have sometimes been in imminent danger. The man-holes having been opened previously, the laborers under charge of Mr. Church, dressed in rough suits, enter the aqueduct at the dam, and travel downward either afoot or in an ingenious car propelled by a crank like the hand-cars used on a railway. The effect is weird and awe-inspiring. Some of the men carry torches, whose smoke and wavering blaze curl and flash in the darkness and throw fantastic shadows and reflections on the moist walls. The voices reverberate like peals of thunder, and seem to awake responsive vibrations in the massive stone and

brick work itself. In some conditions of the atmosphere, laborers repairing the masonry five miles below can be distinctly heard by those at the entrance, and at all times the human voice pitched in an ordinary key can be heard at a distance of two or three miles, in long low rumbles. A broad halo of light frames the men in, and behind this there is an impenetrable blackness, so dense that an inexperienced person takes every step with extreme caution. There are few greater promoters of terror than the power of darkness, and the simple, superstitious Irishmen descending the ladder at the entrance leave sunshine, sky and fields above in no cheerful mood. The short clay pipes are allowed to go out and few words are spoken. It is a business to be done with as soon as possible. Thousands of tons of water are pressing against the gates at the entrance, and should a bar give way, or an order be misunderstood, the flood would rush down upon the unfortunates and engulf them with irresistible force. Once, in fact, an order was misunderstood, and twenty men narrowly escaped with their lives. Mr. Church, with this number of laborers, entered the aqueduct to make some repairs, and instructed the keeper at the dam to let the water flow in again at 11 P. M. The party were making some repairs at a point some distance below the entrance at 11 A. M. when Mr. Church noticed a gradual rise in the water. Afraid of causing a panic, he did not say anything to his men, but urged them on in the hope that the work might be completed that morning. The water continued to rise, however, first submerging their feet, and then creeping up toward their knees with terrible stealth and certainty. The situation was that of a shipwrecked crew cast upon a rock which is being slowly covered by an incoming tide. The engineer now realized the fact that his order had been misunderstood, and that the water had been turned on at the wrong time, and would soon be within a few inches of the roof of the aqueduct. By this time the men were in a highly nervous condition, and Mr. Church had to use his authority in preventing them from making a confused retreat for the nearest exit, which was some distance away. Meanwhile the water had made its way above their knees and was rushing through the aqueduct with a velocity of two miles and a quarter per hour. It was no easy work walking against such a current as this, and the progress made toward the man-hole was unavoidably slow.



The torches were successively put out by the splash until only one remained, and that threw a dim, yellow, uncertain flicker on the dark surroundings. There was one danger which Mr. Church foresaw and was particular anxious to avert. If the men were not kept under control, each would make a disorderly struggle to reach the ladder at the man-hole, and a delay would result that might prove fatal. As the water increased in depth the greater, of course, became their terror, and when the gray light of the opening came into view their bodies were submerged to their waists, while the current almost lifted them off their feet. By reasoning with them and encouraging them, however, Mr. Church allayed their fears and they gained the ladder, and ascended it, one by one, in safety.

In some cases it is not necessary to empty the aqueduct when a local inspection is to be made, and five feet of water is allowed to remain,—enough to float the small metallic life-boat which is used to convey the laborers from point to point. On one occasion, Mr. Church was in this boat

all presence of mind, and by and by one of them lost his hat. Before Mr. Church could prevent him, he made a desperate effort to recover it, and, in doing so, tumbled overboard and was swept downward by the rapid stream. Fortunately, he could swim, and in a few minutes he was dragged on board again. But now the boat was partly filled with water, and its two other occupants were wet to the skin, and it was only with great difficulty that they kept afloat and eventually reached the opening.

On another day the aqueduct was partly drained to enable Mr. Church to make some repairs, and when he had completed them, he immediately sent orders to the dam that the waters be turned on again. A short time after the messenger had started, the engineer learned to his consternation that a keeper some distance below was still in the aqueduct, having entered on finding the water low to make some unauthorized repairs on his own account. Consulting his watch, Mr. Church found that by making great haste he could reach the point where the man was and warn him of his danger,



NEW RESERVOIR PIPE-GALLERY (30 FEET UNDER GROUND).

with two men, who did not at all appreciate the weird novelty of the situation. Soon after entering they began to show signs of great uneasiness, and several times they nearly capsized the boat by blundering with the long poles used to push her against the current. The water was so high that they could not sit upright, and they had to lie flat across the seats. In this uncomfortable position they traveled some distance, but instead of recovering their wits as they grew accustomed to the darkness, they gradually lost

and, accordingly, he procured a horse and set off at a gallop. The water had not yet begun to rise when he arrived, and, as the completion of the repairs was imperative, he sent several laborers into the aqueduct to help the keeper, where trowel and hammer could be distinctly heard at the man-hole. The work was barely finished when the dark flood began to ripple against the walls of the aqueduct, and the men were brought to the surface not a moment too soon.

The explorations sometimes occupy twen-

ty-four successive hours, and Mr. Church was once on duty over seventy-two hours without sleep. The nature of the work exacts constant watchfulness and a mariner's fidelity to duty. The whole length of the aqueduct is carefully inspected twice in every twenty-four hours, and any negligence



B. S. CHURCH, RESIDENT ENGINEER.

or delay on part of the keepers in reporting a leak might cause a disaster of unprecedented horror.

#### VIII. THE QUANTITY AND THE QUALITY OF THE WATER.

THE quantity of water supplied to the city by the aqueduct and reservoirs is now 104,000,000 gallons daily, and as the population is 1,040,000, the supply allows 100 gallons to each person. The minimum flow of the Croton River at its lowest period is 32,000,000 gallons daily. But in long-continued dry weather a deficiency of water occurs, as the capacity of the three reservoirs in the city is inadequate. The Fifth avenue reservoir at Forty-second street holds, as I have stated, 20,000,000 gallons, the old reservoir in Central Park 38,000,000, and the new reservoir in Central Park 1,000,000,000; total 1,058,000,000, equivalent to ten days' supply.

At several points in the region drained by the Croton River, enormous storage reservoirs may be formed by the erection of dams of moderate dimensions, and one such reservoir has already been built at Boyd's Corners, while another is now in course of construction near Brewster's Station on the

Harlem Railroad. It is possible to build 15 of them altogether, which will hold enough water to supply the city for one year! That which is complete covers an area of 303 acres, and has a capacity for 3,369,000,000 gallons, or enough to carry the city through the longest drought ever likely to occur; and should any one doubt the sufficiency of the water gathered in the Croton shed to fill these 15 reservoirs, he may be answered by the fact that the rainfall yields four times as much water as we now consume,—ample, in fact, for a population greater than London. To the allowance of 100 gallons for each man and woman must be added 12,000,000 gallons more pumped from tube wells for the use of factories, and yet, magnificent as the supply is, it was excelled by that of imperial Rome, which gave between three and four hundred gallons a day to each of its citizens.

Few modern cities, however, are so abundantly provided for as New York, and the most important in England receive only half, or less than half, the quantity,—the supply in Liverpool and Edinburgh being 30 gallons per head a day, and in London, Manchester and Glasgow, 50 gallons per head. Perhaps in no other city is water wasted so recklessly, since standard authorities agree that 40 gallons a head per day are ample for all purposes. The people expend it as though it were as inexhaustible a gift as light or air, and are not generally aware that in the aggregate it costs them \$6,000 a day, or \$2,000,000 a year. The annual appearance of the bill invariably excites some remonstrance on part of the housekeeper at the excessive amount charged; but, at the same time, the latter never dreams of using water as though it were a precious and costly commodity. In winter the waste is greatest, for then the water is set running in every house to prevent it from freezing, and nine or ten million gallons are turned into the sewers in a single night. Were each consumer compelled to pay proportionately to the consumption, a better method than letting the water run would be devised, says Mr. Church, who has written a pamphlet on the subject. The house main connecting with the street would be laid below the reach of frost, and the pipes carried up inside instead of against the outside walls, or they would be incased in some such non-conductor as charcoal or sawdust. Self-closing faucets would be used, stopping the water when the hand is removed



GENERAL G. S. GREENE.

from them, and the owners of factories, etc., would adopt like means on the all-potent ground of pecuniary economy. Until some improvement is made, it is futile to hope that the housekeeper who has had any experiences with burst pipes will cease to take the extravagant precaution of letting every tap in his dwelling flow during the frosty winter nights. It may be an abuse revolting to his conscience, but the miseries which it averts—the premature awakening from sleep occasioned by the outcries in the kitchen, the flooded floors and floating furniture, the cook's shrill consternation, the plumber's procrastination and impudent exorbitance—



THE TORCH.

are too distressing not to be avoided at any sacrifice.

A good many people vigorously protest against any stint in the water supply, even though it is wasted. Says Professor Chandler of the Board of Health:\*

"To measure out and sell by the gallon

\* The writer is indebted largely to Professor Chandler and to Mr. George L. Frankenstein for assistance in the preparation of the article, also

the bountiful gift of Croton would be a crime against the city. As a life-saving and life-protecting agent, pure water is hardly second to pure air, and it is the most valuable servant the sanitary authorities call to their aid. Nor is there any other object for which the public funds can be more legitimately expended than for increasing the facilities for using water by the erection of many accessible free public baths. While filth debases, cleanliness exalts."

All hail the champion of bath-tubs, fountains and buckets! But the ardent professor forgets that the prevention of waste need not imply a restriction of the supply for any necessary purpose. On the contrary, it virtually increases and has even doubled the quantity in other large cities, where, as in New York, the demand exceeded the supply. In Liverpool and Glasgow and other cities of Europe, the rule has been found to work wholly in favor of regulating the supply by the introduction of a meter system. These cities are now enjoying a wholesome abundance, while formerly they were stinted, and the prospect is that New York will have the sound sense to follow their example.

Professor Chandler argues "that water meters are four times as costly as gas meters, and that the money devoted to them would, if devoted to the construction of storage reservoirs, give the city more water than it could ever want." He forgets, however, that *the carrying power of the aqueduct is the limit of the supply*. This capacity being now fully taxed, of what

avail would Lake Superior itself be forty miles away, when so much and no more water can be conveyed through the aqueduct to meet the daily demands?

In regard to the quality of the water also, Professor Chandler is enthusiastic. He says

to Mr. John C. Campbell, chief-engineer of the aqueduct. Some of Mr. Frankenstein's delicate and charming sketches were of use in prepping the illustrations.

that the character of the shed in which it gathers guarantees its excellence. Mountains and hills of Laurentian gneiss receive the rain-fall, as we have already seen, in the beautiful valley of the Croton, and after being filtered by pure siliceous sands and gravel, the liquid is restored to the surface through numberless springs, feeding ponds,

which serve as natural storage reservoirs, and creating rivers, down whose course it is borne to the great basin of Croton Lake. In some places it lingers over swamps, and at certain seasons of the year, as when snow melts in spring, it is discolored, but its purity is remarkable at all times, so thorough is the filtration it receives.



LOCAL INSPECTION OF CROTON AQUEDUCT.—THE RETURN AGAINST THE CURRENT.

### VILLAGE SANITARY WORK.

It is a recently recognized, but an old and universal, truth that human life involves the production of refuse matters which, unless proper safeguards are taken, are sure to become a source of disease and death. The danger is not confined alone, nor chiefly, to that element of household waste which is most manifestly offensive, but in almost equal degree to all manner of organic refuse. It is true that fecal matters are often accompanied by the inciting agent of the propagation of infectious diseases. For convenience, and as indicating the more probable means for disseminating infection, we may call this agent "germs." It has not yet been demonstrated with scientific completeness that a disease is spread by living germs whose growth in a new body produces a corresponding disorder; but all that is known of the circumstances of in-

fection, and of the means for preventing it, may be fully explained by this theory. Typhoid fever, cholera, epidemic diarrhea, and some other prevalent diseases, are presumed to be chiefly, if not entirely, propagated by germs thrown off by a diseased body. So far as these ailments are concerned there is, therefore, a very serious element of danger added in the case of feces to the other evil effects which are produced by an improper disposal of any refuse organic matter. That any one or all of these diseases can originate from the decomposition, under certain circumstances, of fecal matters is not clearly determined. There is, however, good reason for believing that one common effect of the gases arising from improperly treated matters of this kind, is to debilitate the human system, and so to create a disposi-

tion to receive contagion, or to succumb to minor diseases which are not contagious.

The same debilitating effect and the same injurious influences, often result from the neglect of other organic wastes. The refuse of the kitchen sink is free from fecal matter, but it contains, in a greater or less degree, precisely the kind of organic material which has gone to make up the more offensive substance. If its final disposition is such as to contaminate the water that we drink or the air that we breathe with the products of their decay, the danger to life is hardly less than that from the decomposition of fecal accumulations.

It is proposed now to set forth, in the simplest way and without much discussion of principles (which may be studied elsewhere), the methods and processes by which village households and communities may be protected against the influences that come from an excess of soil moisture, from damp walls, and from imperfect removal or improper disposal of organic filth.

We will assume that a village has a water supply sufficient to admit of the use of water-closets in all houses, and to furnish a good flushing for kitchen sinks, etc. A necessary complement of this work—indeed it should properly precede it—is the establishment of a system of sewers by which all of this liquid outflow may be carried safely away. It would be out of the question in a small or scattered community, especially where roadways are unpaved, to establish any system which should include in its working the removal of surface water. The moment we undertake to make sewers of sufficient capacity to carry away the storm water of large districts, then we enormously increase the scale and cost of the work.

So far as the removal of house sewage alone is concerned, the work need by no means be very costly. If a tolerable inclination can be given to the line of sewers,—say a fall of one in two hundred,—a six-inch pipe will have a capacity quite up to the requirements of a village of 2,000 inhabitants using 100 gallons of water per day per head. It will, however, be safe to use a pipe of this size only when it is true in form and carefully laid, so that there shall be no retarding of the flow at the joints from the intrusion of mortar, or any other form of irregularity. Unless the joints are wiped

quite smooth, the roughness remaining will serve as a nucleus for the accumulation of hair, shreds of cloth and other matters which will hold silt and grease, and form in time a serious obstruction. Nothing smaller than six-inch pipe should be adopted for a street sewer. Unless the work is to be most carefully done, for all but the branch lines, for a population of 5,000, or less according to the fall of the sewer, it will be safer to use eight-inch pipes. These pipes must be laid with great accuracy as to grade and direction. All corners should be turned with curves of large radius and regular sweep, and with an additional fall to compensate for the increased resistance of curves. The weight of the pipe should not be supported upon the sockets [see Fig. 1], partly as a question of strength, and partly because any irregularity of form or thickness of the socket would change the inclination of the sewer. The bottom of the trench being brought exactly to the required grade, let there be dug out a depression greater than the projection of the socket, the pipe resting upon its finished bottom for its whole length. [See Fig. 2.] Too much care cannot be given to the thorough filling with cement of the space between the socket and the pipe inserted into it,—the whole circle being well flushed and wiped, so that there may be no possibility of leakage.

The objection to leakage is twofold: sewage matters escaping into the soil might contaminate wells and springs; and it would also rob the flow through the pipes of water needed to carry forward its more solid contents. The continued efficiency of these small drains for carrying away the solid or semi-solid outflow of the house, is dependent very largely upon the presence of sufficient water to create a scouring current. While eight-inch pipes are admissible as a safeguard against imperfect laying, they are liable to the grave objection that where the service to be performed is greatly less than their capacity, the stream flowing through them will not be sufficiently



FIG. 1. PIPES RESTING ON THEIR SHOULDERS.



FIG. 2. PIPES RESTING ON THEIR FULL LENGTH.



concentrated to carry forward the more solid parts of the sewage. Up to the limit of their capacity, six-inch pipes, properly laid, are greatly to be preferred, as insuring a deeper stream which will more generally attain the velocity of three feet per second, needed to move the heavier constituents of the sewage. The difference in cost between six-inch and eight-inch pipes will be sufficient to cover any extra cost of the most careful workmanship. However much attention may be given to the cementing of the joints, it will be impossible to prevent the running into the pipes of a certain amount of mortar, and the workman should have a swab or a disk of India rubber of the exact size of the bore of the pipe, with a short handle attached to its middle, to draw forward as each joint is finished, and so scrape away any excess of mortar, before it hardens.

Wherever it is, or may probably become, necessary to attach a house-drain or land-drain, there should be used a length of pipe having a side branch, oblique to the direction of the flow, to receive such connection. The location of these branches should be accurately indicated on the plan, and they should be closed with a flat stone or a bit of slate, well cemented in place.

It will at times be necessary to use larger conduits than even an eight-inch pipe. Up to a diameter of fifteen inches, it is cheapest to use pipes, but for eighteen inches or more, brick-work is cheaper, and at that size—a considerable regular flow of water being insured—the slight roughness of brick-work offers no serious objection. The use of oval or egg-shaped sewers will rarely be necessary under the circumstances that we are considering, but there may be exceptional conditions where the covering in of a brook, or storm-water course, cannot be avoided, and in such cases the volume of water may vary so greatly that there will at times be a mere thread of a stream, and at times a torrent. Here the oval form is the best, as concentrating a small flow within a narrow and deep channel, and still giving the capacity needed for exceptionally large volumes. All bricks used for sewers, man-holes, etc., should be of the very hardest quality, and true in form. The general rule is to be kept in mind that the thickness of the wall of a brick sewer should not be less than one-ninth of the inner diameter,—that is to say that up to a diameter of three feet the thickness of the wall should equal the width of a brick—four inches. This applies to circular sewers only; the oval form, being less strong, calls for a wall

of a thickness equal to one-eighth of the largest diameter.

Connecting drains leading from houses to the sewer are to be made at private cost, but they should be made in accordance with plans furnished by the public authority, and by a workman acceptable to that authority.

The householder might be permitted to take the responsibility of the finishing of his drain but for the fact that the working of the public sewer calls for the largest amount of water in proportion to the amount of solid matters that it is possible to secure, and thus makes it imperative that this drain should be absolutely tight, so that the liquid parts of the house outflow shall not trickle away through its joints, only the more solid parts going into the public sewer.

Properly graded and smoothly jointed, a four-inch pipe will carry more water than even the largest boarding-house or country hotel is likely to discharge. There is, however, a tendency in all house-drains to become filled in the early part of their course by the accumulation of grease and solid matters caught in the grease. Where no form of grease-trap is used, there is a certain argument in favor of the use of six-inch pipes for the upper part of house-drains. The use of a grease-trap, however, should always be insisted upon, and with its aid these obstructing matters will be retained, and the outflow may be perfectly carried by a four-inch pipe.

So far as the public sewer is concerned, it makes little difference what is the size of the house connection drain through the greater part of its course, but the junction with the sewer should, under no circumstances where six-inch sewer-pipes are adopted, be more than four inches. I should even insist on four-inch connections with an eight-inch sewer. Through neglect, or by reason of improper management, many kinds of rubbish find their way into house-drains, and a four-inch opening will admit as many of these into the sewer as it will be able to carry away. If by reason of bad construction or neglect, an obstruction is to be caused at any point, it should be in the drain, which the person responsible for it must cleanse or repair.

The grease-trap referred to above may be any form of reservoir which will retain the flow from the kitchen sink until it has time to cool, when its grease will be solidified, and will float at the surface. The outlet from this trap should be at such a distance below the surface of the water that there will be no danger of its floating matter pass-

ing in with the discharge. A very simple device for this purpose is shown in Figure 3. From a trap of this sort the flow is constant whenever additions are made to its contents.

Figure 4 shows the invention of an English

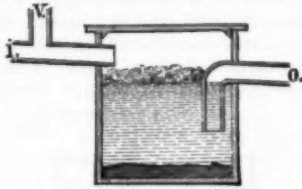


FIG. 3. GREASE-TRAP.  
I, Inlet; V, ventilator; O outlet

engineer, Mr. Rogers Field, which has the effect of retaining all of the outflow from the kitchen sink until it is entirely filled,—say thirty gallons. When filled, any sudden addition of a few quarts of water, as from the emptying of a dish-pan, brings into action a siphon, whose entrance is near the bottom of the tank, and this siphon rapidly discharges all of the contents above its mouth in a flow having sufficient force to carry forward, not only any solid matters which it may contain, but also any ordinary obstructing accumulations in the drain below. The soil-pipe carrying the discharge of water-closets should not be delivered into the flush-tank, but at a point further down the drain, so that any solid matter it may deposit shall be swept forward by the next action of the flush-tank. The more often the flush-tank is filled, and the greater the proportion of its water to its impurities, the more efficient will be its action. Therefore, the slop closet waste leading from the upper story, and even the outlet pipes of bathing-tubs, may with advantage be delivered into it.

Although the flush-tank may receive no fecal matter, and even though the housemaid's sink may not deliver into it, it will contain in the discharge from the kitchen alone an amount of organic matter which will produce offensive and dangerous gases by its decomposition. To provide for the safe removal of these gases a ventilating pipe should be carried up to some point not near to any window or chimney-top.

From the time the sewers are ready for service no accumulation of fecal matter or other organic household waste should be allowed to remain in the village. All old vaults and cess-pools should be filled with earth and disinfected by the admixture of lime with the upper layers of the filling. The use of water-closets in all

houses should be made imperative, and the construction and arrangement of soil-pipes and of all outlets should be regulated by the health authorities.

It is not worth while here to discuss the details of the construction of water-closets and other interior plumbing work, except with reference to soil-pipes and such drains as may deliver the outflow of the soil-pipe to the public sewer. All soil-pipes should be of cast-iron, carefully jointed with lead, not less than four inches in diameter, and carried by the straightest course possible up through the roof and higher than the ridge-pole. Its open top must not be near any window, and if within ten feet of a chimney it should be at least two feet below the level of the top of that chimney. There should be no trap in the soil-pipe and no trap in a private drain between the outlet of the soil-pipe and the sewer. The reasons for this rule are twofold:

1. No matter what amount of water may be used for flushing out the soil-pipe, its sides will always be more or less coated with organic filth, and however slight this coating there will be a certain amount of decomposition. The decomposition of all such matters must be rapid and complete, not slow and partial. A necessary condition of complete destructive decomposition is an abundance of atmospheric air

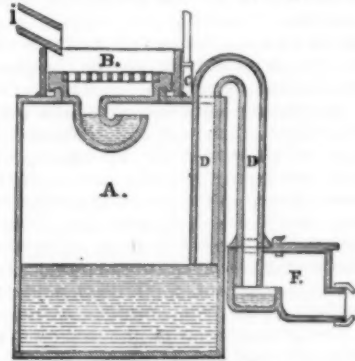


FIG. 4. FIELD'S FLUSH-TANK.  
A, Receiver; B, grating; C, ventilator; D, siphon; F, entrance to drain; I, delivery from sink.

to supply the oxygen which complete decomposition demands. If the soil-pipe is closed at its top, or if it is obstructed by a trap in the lower part of its course, there can be no such circulation of air as safety requires.

If there is an opportunity for the free admission of air from the sewer to feed the

upward current almost constantly prevailing in a soil-pipe open at both ends, the gases resulting from the decomposition will be of a different and less injurious character than where the air is confined,—and by the mere volume of air passing through the pipe they will be so diluted that even were they originally poisonous their power for harm will be lessened. The gases formed by the decomposition of organic matter in the sewer itself, or in the soil-pipe, have a certain expansive force which is greatly increased by the elevation of temperature, caused, for example, by the discharge of hot water into the pipe or sewer. If the soil-pipe is open at its upper end this expansion will be at once relieved, but if the top of the pipe be closed there will always be danger of the forcing of the feeble barrier offered by the ordinary water-seal trap of a branch pipe leading from a wash-basin or sink. Then, too, the sealing water of the trap readily absorbs any foul gases presented at its outer end, toward the soil-pipe, and gives it off in an unchanged condition at the inner or house end. Such traps retard, but do not prevent, the entrance of sewer gases into the house. Water-seal traps which are unused for any considerable time are emptied by evaporation, and thus open a channel through which the air of the soil-pipe may find its way into the house.

It is usual in modern plumbing to relieve the pressure of gas in the soil-pipe by what is called a "stench-pipe." This is a pipe from one to two inches in diameter, leading from the highest point of the soil-pipe to the outside of the roof, where it is bent over to prevent the entrance of foreign matter, or is closed at the top and perforated with holes to allow the gas to escape. This small stench-pipe is inadequate for the necessary work. It is very important that there be the freest possible channel for the movement of air, and nothing will suffice for this save the continuing of the pipe, at its full size, to its very outlet. Indeed, angles and bends in a pipe form a serious obstruction.

The arrangement of the soil-pipe here indicated, although excellent and efficient, is susceptible of further improvement by the use of a ventilating cowl or hood at the top of the soil-pipe. There are many forms of such cowls in use which are effective whenever there is a sufficient current of wind; but most of them require a certain force to bring them into action, and when this force is absent they usually retard the flow they are intended to increase. This is true of a recent invention known as "Banner's ven-

tilating cowl," which so long as the wind blows is a most effective device. When the air is perfectly still, however, it offers by its curved air-way a certain resistance to the current, and in the case of baffling winds and flaws the air may blow directly into its opening.

Among the various inventions of this sort nothing seems so free from objection as the old arrangement known as the "Emerson" ventilator, shown in Figure 5. This gives a

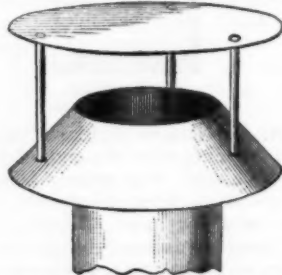


FIG. 5. THE EMERSON VENTILATOR.

straight outlet, protected by a disk far enough above it not to prevent its delivery of air, and it becomes an effective suction cowl, with the least movement of the wind from any side or from above or below. No eddy caused by the angles of gable roofs can give it a backward draught, and if a pipe armed with it be held toward the strongest gale a puff of smoke blown into its other end will be instantly drawn through. As the patent for this invention has run out, it is competent for any tinsmith to make it, and it is a common article of manufacture.

11. What is said above concerning the ventilation of the soil-pipe from end to end relates to the interest of the private owner. The interest of the public gives an equally strong argument in its favor. The sewer should be as far as possible removed from the condition of an "elongated cess-pool." There must be no halting of its contents, and no deposit of filth or silt at any point. Within the shortest time possible, everything received into the sewer must be passed on and delivered at its outlet. Still, however perfectly this may be accomplished, there will always be a certain adhesion of slime to the walls of the sewer, and this slime must always be in a state of decomposition,—a constant source of offense and possible danger. The only way to avert this danger is to give the sewer such a thorough ventilation that the decomposition shall be rapid and safe, and that the resultant gases shall be at once diluted with fresh air.

This may be accomplished by the simple ventilation of the sewer itself, through open-topped man-holes; but such ventilation is less effective in the case of small sewers than of large ones. In the case of either large or small sewers it will be vastly increased if we compel every householder who makes a connection with the sewer, to carry a drain and soil-pipe, nowhere less than four inches in diameter, from the point of junction with the main line to the open air above the roof. Where houses are near enough to make the use of a public sewer advisable, the aggregate of these soil-pipes having, almost constantly, an upward current, will make such a draught upon the sewer, to be supplied by a downward current through the man-hole covers, as will maintain a perfect and continuous ventilation.

Important as it is to secure the proper arrangement and construction of sewers and house-drains, it is still more important to provide for the safe disposition of the sewage.

We must begin at the outset with the understanding that all sewage matters not only are of no value to the community, but that it will cost money to get rid of them.

There is hardly an instance, after all the efforts that have been made, of the *profitable* disposal of the outflow of public sewers. The *theoretical* value of the wastes of human life is very great, but the cost of any method for utilizing it seems at least equally great. The question of cost is so much more important (to the community) than the question of agricultural value, that the practical thing to do is to make such disposition as will cost the least, while fully meeting the best sanitary requirements.

So far as village sewage is concerned, there are three means open for its disposal: to discharge it into running water or into deep tide-water; to use it for the surface irrigation of land; or to distribute it through sub-irrigation pipes placed at little distance below the surface of the soil. Experiments are being made with more or less promise of success in the direction of the chemical treatment of this liquid so as to purify its effluent water, and retain in a solid form, and in combination with certain valuable added ingredients, all of its undissolved impurities. None of these processes can as yet claim consideration in regulating public works.

The cheapest way to get rid of sewage is to discharge it into a running stream or into tide-water. So far as the community itself is concerned, this is often the best way, but

there will very often arise the objection that the community has no moral or legal right to foul a stream of which others make use in its further course. Where the amount of water constantly flowing is very large, and where the discharge is rapid,—any given part of the sewage reaching the open air within a few hours from the time of its entering the pipes,—and where it flows in moving water for a considerable distance before reaching others who may have occasion to use the stream, no practical danger is to be apprehended. But where the sewage is more foul, more sluggish, or exposed in the open current for a shorter time, the danger may be serious. The pouring of sewage into tide-water is always admissible where floats show that there is no danger of a return and deposit of solid filth; but the delivery, at all stages of the tide, in the immediate neighborhood of salt marshes and mud flats, and in land-locked harbors is to be avoided.

Where an unobjectionable natural outflow cannot be provided, the irrigation of agricultural lands affords the best relief. The action of vegetation, the oxidation which takes place in the upper and well aerated layers of soil, and the well-known, but not yet fully explained, disinfecting qualities of common earth, are effective in removing the dangerous and offensive impurities, and in converting them into a more or less important source of fertility. Precisely how far this system may be available during winter it is not easy to say. While the earth is locked with frost, there must be very little, if any, infiltration; but as an offset, the action of a low temperature upon the sewage matters will clearly be antiseptic, and it is only necessary to provide against an undue washing away of the surface of the ground during thaws, and against the flowing of the sewage beyond the proper limits.

Generally, in the neighborhood of villages it will be easy to find lands over which the delivery may be carried on throughout the year without objection. The sewer, or some form of covered channel, should lead far enough from any public road to avoid offense. From this point it may be led by open gutters to the land over which it is to be spread,—or rather through such a system of surface gutters as will enable us to deliver it at different parts of the field, according to the requirements of the crops, and so as to use fresh land at frequent intervals, leaving that which has been saturated to the purifying processes of vegetation and atmospheric action:

The gutters having been made, it is easy, by the use of portable dams,—of thin boiler-iron, like broad shovels,—which may be set in the course of the flow, to divert the current into any branch channel or to stop it at any desired part of this channel. All the gutters having sufficient descent to lead the sewage rapidly forward, it is usual to set a dam near the far end of the gutter and allow the sewage to overflow and run down over the surface until it has reached as far as the formation of the ground and the quantity of the liquid will allow it to spread. This portion having received its due amount of the liquid, the dam is moved to a higher point and the overflow is allowed to spread over a second area. In this way, step by step, we irrigate all that may be reached by a single gutter. Then the moving of the dam in the main line turns the water into another gutter, and this is proceeded with in like manner. In practice it is found best to begin the overflow at the farthest end of the lowest-lying gutter, working back step by step until the higher parts of the field are reached. It would be better that there should be land enough to require the irrigation of any given area not oftener than once in one or two weeks. The amount required for a given population cannot be determined by any fixed rule,—so much depending on the amount of water used per capita, and on the absorptive character of the irrigated soil. In the case of villages, one acre to each five hundred of the population would generally be found ample. There are several instances of the successful use of a much smaller area than is here indicated, by the use of intermittent downward filtration. The most noted instance of success in this direction is that at Merthyr-Tydvil in Wales, a large mining town, where the allowance is only one acre to each two thousand of the population. There are two filter-beds of light loam over a gravelly subsoil thoroughly underdrained with tiles at a depth of six feet. One of these beds is cultivated with some crop, like Italian rye-grass, which bears copious irrigation, and the other by some crop, like wheat, which, in the absence of irrigation, will thrive on the fertility left over from the previous season. The volume of sewage is very great, but the action of the six feet of earth in removing its impurities seems to be complete,—the water flowing out from the drains having been proved by analysis really to be far purer than the standard fixed by the Rivers Pollution Commission.

It is an important condition of this system that the sewage, where its quantity is small, shall be stored in tanks until a large volume has accumulated, and that it then be rapidly discharged over the soil. There is no objection to an actual saturation of the ground provided the soil is not of such a retentive character as to be liable to become puddled and so made impervious. The tanks being emptied, the flow ceases until they are again filled. During the interval the liquid settles away in the soil, by which its impurities are removed. Its descent is followed by the entrance of fresh air, and the oxydizing action of this, accompanied during the growing season by the purifying effect of the growing crop, leads to an entire decomposition or destruction of all organic matters.

The third system,—the distribution of sewage through irrigation pipes laid at a depth of ten or twelve inches below the surface of the ground has its efficiency attested by numerous instances in private grounds. I have with confidence adopted it for disposing of the sewage of the village of Lenox, Massachusetts, where there was no other means available short of cutting an outlet at great expense through a considerable elevation. This system is an extremely simple one, and is available in every instance where even a small area of land lying slightly below the level of the outlet is to be commanded. The arrangement of the sub-irrigation pipes is simple. Suppose that in land having an inclination of about one in two hundred, occupied by grass or other growth, a trench be dug twelve inches deep, that there be laid upon the bottom of this trench a narrow strip of plank to insure a uniform grade, and that upon this plank is laid a line of common agricultural land-drain tiles,—say two inches in diameter. However carefully these tiles may be placed, there will be at their joints a sufficient space for the leaking out of any liquid they may contain,—the tiles being laid either with collars around the joints or with bits of paper laid over them to prevent the rattling in of loose earth during the filling. The excavated earth is to be returned to its place, well compacted, and covered with its sod. Suppose this drain to have a cross section equal to three square inches, and a length of one hundred feet, its capacity will equal about sixteen and a half gallons or a half barrel. If this amount of liquid be rapidly discharged into the drain, the inclination being slight, it will



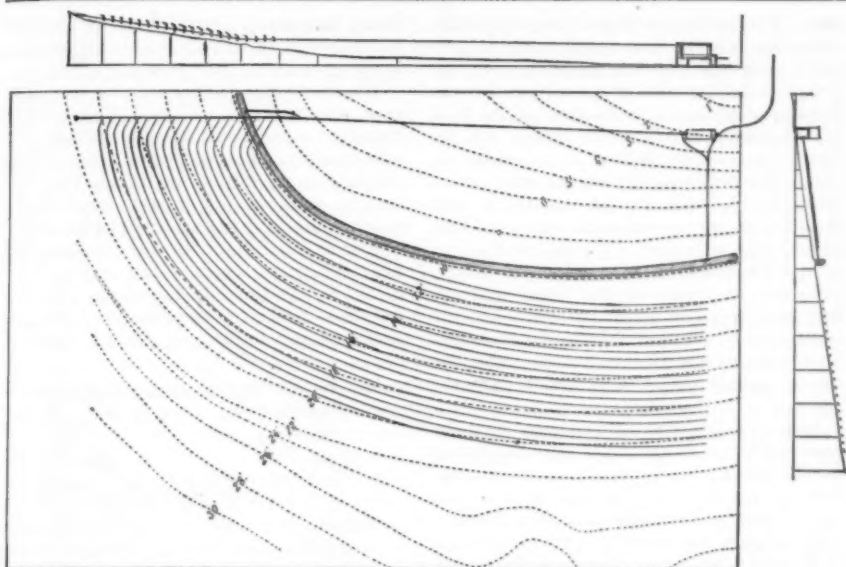


FIG. 6. DIAGRAM ILLUSTRATING MANNER OF SEWAGE DISPOSAL AT LENOX, MASS.

at once be filled or nearly filled for its whole length, and the liquid will leak away in tolerably uniform proportion at every joint along the line and will saturate the surrounding earth. The plan adopted at Lenox and recommended for all small villages which cannot secure a better outlet, is simply a multiplication of these drains to a sufficient extent.

A description of the manner in which the Lenox work is arranged will illustrate the adaptation of the system to its circumstances. As circumstances vary, the adaptation must be modified. [See Fig. 6.]

The main outlet sewer delivers at a distance of about one-half mile from the last junction with a branch sewer. It is a six-inch pipe five feet below the surface of the ground, and it delivers into a flush-tank like that shown in Figure 4, but having a capacity of about five hundred cubic feet. This tank stands at the upper side of a field having an inclination of seven in one hundred. There is a branch from the main sewer, above the tank, supplied with a stop-cock, by which, in case of need, the sewage may be carried on down the hill without going into the tank. The outlet from the chamber below the siphon leads off in another direction down the hill, and has a stop-cock and a branch which will allow its flow to be diverted. The discharge of this diverted stream and the discharge

through the branch of the main above the tank, both deliver into a horizontal surface gutter, to be well grassed, and lying at the top of the land to be irrigated. By this arrangement, should repairs become necessary in the tank, the flow may be turned into the gutter; or, should it be desired for any reason to use the outflow of the tank for surface irrigation, the second branch outlet will deliver it into the same gutter, where, the overflow being uniform along the whole length of five hundred feet, the stream will pass in a thin sheet off on to the descending ground. The hill-side, immediately below the gutter, is brought to a true grade and covered with grass. As its inclination is much greater than would be admissible for sub-irrigation drains, these are laid *obliquely* in parallel lines at intervals of six feet from one end to the other over the whole graded slope. These drains are connected at their upper ends with the direct outlet pipe leading from the siphon chamber. They have an aggregate length of about ten thousand feet. The method of operation is as follows:

The capacity of the tank is supposed to equal about two days' discharge, or about thirty-five hundred gallons, and the whole capacity of the drains is about half that of the tank, so that the rapid emptying of the whole volume into them will insure their being pretty thoroughly filled from end to

end. This arrangement will provide for the saturation of the soil about once in two days, and will leave a sufficient interval between the periods of saturation for the thorough dispersal and aeration of the filth.

The extent to which this system will be interfered with by frost it is impossible to say. This will probably be less than would be supposed, for the reason that the ground would often be covered with snow, and that the sewage will have sufficient warmth to exert considerable thawing influence. Whenever the discharge of the liquid through irrigation pipes is shown to have become obstructed by freezing, it will only be necessary to divert the flow and turn it into the surface gutter to be distributed over the ground.

It is possible that in this case, as in the one which has been under my observation for six years past, there will be no interruption of the working because of cold, but should the interruption become serious, I shall propose the planting of evergreen trees in parallel rows midway between the drains. The protection that would thus be afforded, both by the trees and by the drifting snow which they would gather, would probably keep the ground free throughout the winter. Incidentally to the chief advantage of this system, there will be, so long as the land is in grass, quite an addition to its product.

These works were nearly completed in the autumn of 1876, but will not be entirely ready for use until the coming summer, so that I am unable to point to their successful working in support of my argument. They constitute, however, only an extension of a process which, here and in England, has been in successful operation for ten years.

There are hundreds of villages, with and without a water supply, where the houses are too scattering and the street lengths too great to make it advisable that the heavy cost of any form of public sewerage should be assumed. In all such villages, the public authority or the active influence of the Village Improvement Association should be exerted to secure a regular and systematic adoption of some more perfect system for the private disposal of household drainage than is usual. Fortunately, the best system is the cheapest.

No form of cess-pool, no leaching vault, and no cemented tank should be allowed under any circumstances. Neither should there be permitted any form of the old-fashioned out-of-door privy with a vault.

Every household should be supplied with water-closets, or well-arranged earth-closets, to which reference will be made below.

The foul water discharge of kitchen sinks, or of whatever form of slop-sink is used for the water of bedrooms, should discharge into a flush-tank, and should be led from this by a tightly cemented four-inch drain to a tight settling basin in the ground beyond. If water-closets are used, the soil-pipe should deliver into the drain between the flush-tank and the settling basin. The settling basin should be constructed as shown in Figure 7, and this, as well as the flush-tank, the soil-pipe, and the connecting drains, should be

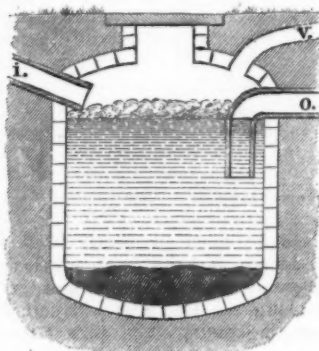


FIG. 7. SETTLING BASIN.

amply ventilated. The outlet from the settling basin should be carried by well-cemented, vitrified pipes (four-inch) to the connection with the subsoil irrigation pipes. The flush-tank discharging at each operation of its siphon about thirty gallons of liquid, two hundred feet of drain, unless the soil is very compact, will dispose of the whole discharge with sufficient rapidity. The tank being emptied, the flow ceases, and within a very short time the drain becomes empty of its contents, which are absorbed by the sponge-like action of the earth, and are subjected to the combined influence of the roots of plants, and of the concentrated oxygen contained among the particles of the soil. They will soon have their character entirely changed, so that the earth will become purified, and will be ready to receive the next discharge from the tank. In the case of my own drains, after five years of unremitted use, the gradual accumulation of bits of grease and more solid matters obstructed the drains, and there appeared undue moisture about their upper ends. All that was then necessary was to re-open the

trenches, and remove, wash, and replace the tiles. This operation cost for a length of two hundred feet less than three dollars.

For any ordinary household of six or eight persons, where the water-closet is not used, two hundred feet of drain of this sort will be sufficient. If there are water-closets, it may be well to duplicate the length; and, to provide for the necessary connections to lead the liquid to the drains, we may assume that in all five hundred feet of length will be required. The cost of two-inch tiles, at the works, in small lots and where collars are furnished, is about three cents per foot, and we will suppose that transportation will increase the cost to five cents per foot, making the cost of this item twenty-five dollars. The strips of board (three inches wide) will cost, at a very liberal estimate, five dollars more, and the cost of digging and laying not more than another five dollars, so that the establishment of this means of disposal, under the most liberal allowance of prices, will not exceed thirty-five dollars. Ordinarily, especially where neighbors combine to buy their material in larger quantities, it will hardly exceed one half of this amount. This, be it understood, is for a complete and permanent substitute for the expensive and nasty cess-pool now so generally depended upon in the country.

A piece of ground fifty feet square, having ten rows of tile five feet apart and fifty feet long, will suffice for even a large household with an abundant water supply. For the better illustration of the arrangement of this system, I give in Figure 8 a plan for the work in the case of a lot fifty feet wide, with a depth of open ground behind the house of somewhat more than fifty feet. The leaching-drains may safely begin at a distance of even ten feet from the back of the house—requiring for the whole a clear area of only fifty feet by sixty feet. With small households the length of drain may be very much shortened. In my own case, where water-closets are not used, the total length of irrigation drain is only two hundred feet.

The Earth-Closet was invented by the Rev. Henry Moule, Vicar of Fordington in England, more than ten years ago. Its progress in England has been considerable, and its introduction there has resulted in a profit to the company undertaking it. In this country it has met with less general favor; two companies, with large capital, after expending all their resources, have been obliged to abandon their attempts

to build up a profitable business. Having been actively interested in the enterprise from its inception, and having given constant attention to the merits of the system, I am to-day more than ever convinced that the solution of one of the most difficult problems connected with country and village life is to be sought in its general adoption. The public reports of sanitary officers in England, who have investigated the subject to its foundation, fully confirm every thing that has been claimed by the advocates of the earth-closet, unless, perhaps, in connection with the incidental question of the value of the product as a manure. The only thing which now deters the authorities of some of the larger manufacturing towns of the north of England from adopting the dry-earth system as a means of relief, under the sharp exaction of the law that prohibits

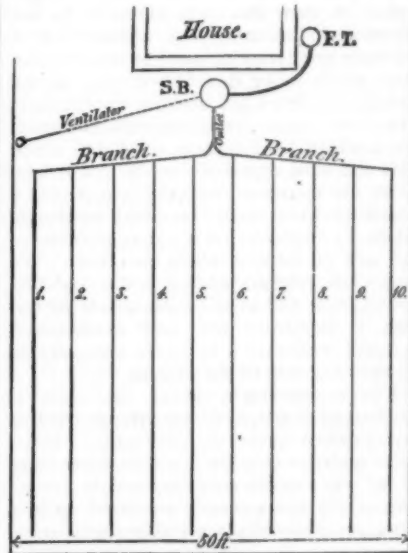


FIG. 8.

their further fouling of water-courses, is the belief that the labor of bringing into the town the enormous amount of earth required to supply such an immense number of closets and the labor of removing the product at frequent intervals, would be so great as to constitute an insurmountable obstruction. Professor Voelcker, in a paper published in the journal of the Royal Agricultural Society, shows pretty conclusively that even the use of the same earth four or five times over, although perfectly successful in accomplish-

ing the chief purpose of deodorization, fails to add to it a sufficient amount of fertilizing matter to make it an available commercial manure. Extended experience in small villages and public institutions seems to confirm his view that if the earth-closet is to be adopted by towns, they cannot depend either on farmers buying the manure, or undertaking the labor of supplying and removing it. It is estimated that for a population of one hundred thousand persons, there would be required seventy-five tons of earth per day, to say nothing of heavy refuse matters which would be thrown into the closets, and would increase the amount to be removed. Even the quantity required for a village of a few hundred inhabitants, if it were to be brought in and carried out, would entail a considerable cost for handling.

I have recently concluded an experiment of six years' duration, the result of which seems to show that this objection to the adoption of the earth-closet system may be set aside or at least reduced to such proportions as to make it unimportant. In the autumn of 1870 I had brought to my house, where only earth-closets are used, two small cart-loads of garden earth, dried and sifted. This was used repeatedly in the closets, and when an increased quantity was required additions were made of sifted anthracite ashes. I estimate that the amount of material now on hand is about two tons. We long since stopped adding to the quantity, finding that the amount was ample to furnish a supply of dry and decomposed material whenever it becomes necessary to fill the reservoirs of the closets.

The accumulation under the seats is discharged through simply arranged valves into bricked vaults in the cellar. When these vaults become filled,—about three times in a year,—their contents, which are all thoroughly decomposed, are piled up in a dry and ventilated place with a slight covering of fresh earth to keep down any odor that might arise. After a sufficient interval these heaps are ready for further use, there being no trace, in any portion, of foreign matter or any appearance or odor differing from that of an unused fresh mixture of earth and ashes. In this way the material has been used over and over again, at least ten times, and there is no indication to the senses of any change in its condition.

A sample of this material has recently been analyzed by Professor Atwater, at the Connecticut Agricultural Station, at Middletown. The analysis shows that it con-

tains no more organic matter than Professor Voelcker found in fresh earth prepared for use in the closet,—say about two hundred pounds,—nearly all of which organic matter it undoubtedly contained when first made ready for use. In my case, there was an addition at a moderate calculation of at least 800 lbs. of solid dry matter during the six year's use by an average of four adult persons. Professor Voelcker's analysis showed that the unused earth contained about twelve pounds of nitrogen. Professor Atwater's analysis shows that my two tons contained only about eleven pounds of nitrogen. By calculation, the 800 pounds of solid dry matters added in the use of my material contained 230 pounds of nitrogen.

Doubtless the constitution of Professor Voelcker's sample was somewhat different from the original constitution of my own; but, practically, except perhaps for the addition of a trifling amount of residual carbon remaining after the decomposition, they were about the same, and after being used ten times over, the whole of the 800 pounds of organic matter added, including 230 pounds of nitrogen, seem to have entirely disappeared.

It becomes interesting and important to know what has become of this added matter. That it was absorbed into the particles of the earth is a matter of course, and the result proves that after such absorption it was subjected to such a chemical action of the concentrated oxygen always existing in porous dry material as led to its entire destruction. Porous substances condense gases—air, oxygen, etc.—in proportion to the extent of their interior surface. The well-known disinfecting action of charcoal—the surface of the interior particles of which equal from fifty to one hundred square feet to each cubic inch of material, and all of which surface is active in condensing oxygen—is due not simply to an absorption of foul-smelling odors, but to an actual destruction of them by slow combustion, so that the same mass of charcoal, if kept dry and porous, will continue almost indefinitely its undiminished disinfecting action.

The earth used in the closet is a porous material, sufficiently dry for the free admission of air or of oxygen. The foulest materials when covered with dry earth at once lose their odor, and are in time as effectively destroyed by combustion (oxydized) as though they had been burned in a furnace. The process is more slow but none the less sure; and it is clear that in the case of my dirt-heap the

foul matters added have thus been destroyed. The practical bearings of this fact are of the utmost importance. Earth is not to be regarded as a vehicle for the inoffensive removal beyond the limits of the town of what has hitherto been its most troublesome product, but as a medium for bringing together the offensive ingredients of this product, and the world's great scavenger, oxygen. My experiment seems to demonstrate the fact that there is no occasion to carry away the product from the place where it has been produced, as, after a reasonable time, it has ceased to exist, and there remains only a mass of earth which is in all respects as effective as any fresh supply that could be substituted.

The quantity necessary to provide can be determined only by extended experiment; my experiment proves that the amount needed does not exceed one thousand pounds for each member of the household, and that this amount once provided will remain permanently effective to accomplish its purpose.

With a suitable public supply of water for the purpose, and with a suitable means of disposal, nothing can be better and nothing is more easily kept in good condi-

tion than well regulated and properly ventilated water-closets. Where these are available, with enough water for their flushing, their use is to be recommended. Where there is not sufficient water, there a well-regulated system of earth-closets seems to be imperatively demanded. By one process or the other we must prevent the fouling of the lower soil, and the consequent tainting of wells and springs, and the ground under houses and adjoining their cellars. With a system of sub-irrigation pipes which deliver foul matters into earth that is subject to the active operation of oxydizing influences, we need fear no contamination of the deep and unacrated soil. It would be better, however, where this system is used, for the disposal of the outflow of soil-pipes, to avoid the use of wells. As a general rule, it is safer not to use for drinking purposes the water of any well near a house or a stable,—practically, it is better not to use wells at all as a source of water for domestic supply. Filtered cistern water is greatly to be preferred.\*

\* For further discussion of this topic by the same writer, see the "Home and Society" department of the present number.—ED.

## THE SOUL'S IMMORTALITY.

### AN ATTEMPT AT A SOCRATIC DIALOGUE.

*Socrates.* Wherein, Alciphron, does a living tree differ from a dead tree?

*Alciphron.* A living tree adds to its bulk. A dead tree loses from its bulk.

*Soc.* And wherein besides this?

*Al.* A living tree produces fruit, and seed also, by which its kind is propagated. A dead tree does neither of these things.

*Soc.* And besides these?

*Al.* A living tree prefers light, and also a soil suited to its demands, as possessing richness and moisture. A dead tree is indifferent to such things.

*Soc.* And once more?

*Al.* A living tree chooses such elements from the soil as make for its own prosperity, and enable it to yield what it was intended for; and it rejects what do not belong to it. A dead tree makes no choice.

*Soc.* And yet once more?

*Al.* A living tree is always seen making an effort to repair any injury that happens to it. If its bark or covering, for instance, is bruised, it sets itself to work at once to heal the wound. A dead tree does nothing of the kind.

*Soc.* And the more thriving, and prosperous, and happy, the living tree is, the more certain it is to do these things. Is that not so?

*Al.* I think that is also true.

*Soc.* And is there any stage in the life of a tree or plant, when it first begins to do these things, having up to that time failed to do them?

*Al.* I think there is no such stage in the life of a tree or plant. They do these things from the beginning.

*Soc.* A tree then never is guilty, as a child is sometimes, of things hurtful to itself, so that we say of it, "when it is old enough, it will know better?"

*Al.* I think not.

*Soc.* And whether do you regard a living tree or a dead tree with the most pleasure?

*Al.* Certainly the living tree.

*Soc.* And why the living tree?

*Al.* For many reasons. It is much more beautiful and pleasing to the eye, as a living object is always more agreeable to look at than a dead object.



*Soc.* And what other reason besides this you have mentioned?

*Al.* I think we attribute a kind of enjoyment to a living tree that is prospering, and so the sight of it affects us pleasantly.

*Soc.* And what besides this?

*Al.* I think there is one other reason. There is nothing like a failure about it, but it seems to be doing just what it was designed to do.

*Soc.* And does a dead tree seem to be a failure?

*Al.* I do not mean so. But after a tree has become dead, it ceases to bring to our minds that sense of a success, which we got from it when living. That is all.

*Soc.* It is not then that you discover anything like a failure when you look upon a dead tree, and so your pleasure in looking at it is less for that reason?

*Al.* I discover no failure, nor does it seem to me to be so. It is this only—that it has ceased to be an agreeable object to look at.

*Soc.* Only then that there is nothing there which reminds you that it is a success, you would still have left that reason for regarding it with pleasure?

*Al.* Certainly.

*Soc.* And its having died conveys no hint of failure, and of consequent disappointment on the part of its author, because it had not answered the purpose for which it was intended?

*Al.* It conveys no such hint.

*Soc.* And what chiefly lessens your pain at its dying?

*Al.* The thought that it has done that which it was intended to do.

*Soc.* And whether is there any thought suggested of an incompleteness, or unfinished condition, when you look upon a tree?

*Al.* None whatever.

*Soc.* And particularly why?

*Al.* Because it seems impossible to me to regard a thing as incomplete, which is so evidently and so perfectly fulfilling the design of him who made it.

*Soc.* And I think you never fear lest a tree, having a variety of things offered it to choose from, should ever make a mistake, and so choose that which is not good for it?

*Al.* I have no such fear.

*Soc.* And when a tree thus converts certain elements in the atmosphere and in the soil into fruit, and leaf, and bark, and woody fiber, do you object to giving to these elements so converted, the name of "Equivalents?"

*Al.* I see no objection to that use of the word.

*Soc.* And it is because the tree does not fail to make use of these equivalents, that it is a success. Is that so?

*Al.* I think that is so.

*Soc.* Is it in considering a tree only, that you discover what we have agreed to call equivalents?

*Al.* No. I discover them elsewhere.

*Soc.* And when you find Nature has furnished these equivalents, whether do you ever doubt that upon being resorted to, they will yield the appointed result?

*Al.* I never have such doubts.

*Soc.* And I believe you agree that Nature never makes a mistake, and never meets with disappointment, because, having offered what she regarded as equivalents, they in the end proved to be not so?

*Al.* I agree to that. I think Nature is never seen making such mistake.

*Soc.* Once more. You agree that when it is once settled what an equivalent in a given case is, there can be no substitute for it?

*Al.* That also I agree to.

*Soc.* It appears then, that a tree, and other things which succeed in Nature, are a success, because they in the first place are never mistaken as to what a true equivalent is, and then they always make choice of it. Whether do we seem to you to be safe in saying that?

*Al.* I think perfectly safe. It seems to me entirely true.

*Soc.* And if passing by trees, you turn your attention to other products of Nature, Whether does all that you have been saying appear to be equally true?

*Al.* It seems quite true everywhere.

*Soc.* Whenever then Nature furnishes equivalents, or in other words, makes an expenditure, you feel sure of a return that is both adequate in amount, and suited also in the nature of it, to that expenditure. Is that so?

*Al.* I certainly think that is so.

*Soc.* But I believe you do not deny that a child sometimes chooses what is not good for it?

*Al.* This, it is true, seems to be an exception to the rule.

*Soc.* And whether is there any explanation for this exception?

*Al.* I think we say in such a case, that when the child is old enough, it will know better, and choose better.

*Soc.* And since the child at present does not know and choose better, you conclude it is incomplete—not yet finished?

*Al.* That is the conclusion.

*Soc.* So that, if never having yet seen or heard of such a thing as a child, and quite ignorant of any law or provision by which it should pass out of a state of childhood into a state of manhood, you should then first come to see and know a child, and learn of this imperfection which belongs to it, you would infer that it was thus far incomplete, and was destined to pass into another state, as a state of manhood, for instance, and so the rule which you find applied everywhere else would come at last to be applied here also. Is all this true?

*Al.* I think it is all true. It seems to me I should infer as you have suggested.

*Soc.* And identically why?

*Al.* Because if this were not so, it would violate a law which seems intended to be universal; and again because if it were not so, the child would be worse provided for than a tree is. But as a child is of more value than a tree, it ought to be better provided for.

*Soc.* And a little further, Alciphron. When the child ceases to be so, and becomes a man, is he then seen choosing only that which is good for him, and rejecting that which is bad for him?

*Al.* I cannot think that is so.

*Soc.* And whether is he seen, or is the soul of man seen, trying to repair always any hurt or injury that happens to it?

*Al.* I think not.

*Soc.* And still further, does it seem to you that this soul always seeks out and makes use of certain equivalents that have been appointed for its sustenance and prosperous growth?

*Al.* Certainly not.

*Soc.* Is not here then another instance where Nature has provided equivalents that do not yield their return, and so she has been disappointed?

*Al.* It seems to be so.

*Soc.* And whether does the soul very frequently fall into mistakes as to what are equivalents, resorting not only to those which are useless, because they are not rightly selected, but to those also which are hurtful?

*Al.* I think it is impossible to deny that.

*Soc.* If then the soul knowingly rejects equivalents for its own good, and if furthermore it often mistakes what are true equivalents, does it not seem to carry with it the same evidence of incompleteness—of being in an unfinished state, as the child does who,

being as you say, of more value than a tree, still is seen taking less care of itself than a tree does, and less anxious for its own perfection than a tree is?

*Al.* I think the evidence of incompleteness is as strong in this case of the soul, as in the other of the child.

*Soc.* And, Alciphron, may we not say of a living, prosperous tree, that it is seen desiring its own happiness?

*Al.* I think I understand what is intended by that form of expression, and I see no reason why it should be objected to.

*Soc.* And may we not say of anything, which, in the sense here intended, is seen uniformly desiring its own happiness, that is, of anything which seeks instantly always to repair any injury to itself,—which always knows without possibility of mistake what are the true equivalents for its growth and prosperity, and then furthermore always without fail chooses such equivalents,—may we not say of such a thing as this, that it has reached a finished state—a state of perfect completeness?

*Al.* I certainly think we may use such language respecting it.

*Soc.* And if on the contrary we find something steadily refusing to do any of these things, or doing them only irregularly and capriciously,—in other words, if we find something not desiring its own happiness, deliberately setting aside what it knows to be for its own happiness in favor of something opposed to it, or else left in doubt what is for its happiness,—must we not infer of a thing like this, that it has not yet reached a complete and finished state?

*Al.* This seems also true.

*Soc.* If it were not so,—that is, if we could not take refuge by saying, as we said of the child, that when it is old enough, it will know and choose better,—would it not appear that certain equivalents in one instance at least have been created in vain, and that in one instance Nature has been disappointed?

*Al.* I think it would so appear.

*Soc.* And, Alciphron, which would seem the greater absurdity—to create something, and then withhold the equivalents necessary to bring it to perfection, or to furnish equivalents, and then create nothing that should make use of them?

*Al.* I think one absurdity is as great as the other.

*Soc.* If there be then such a thing as a human soul, you do not doubt that equivalents have been provided for it, using which,

it shall prosper as certainly as a tree prospers, when it makes use of equivalents provided for it?

*Al.* I have no such doubt.

*Soc.* And if, on the other hand, you find certain existing equivalents which would be useless if there were no such thing as a human soul, you infer from such equivalents that there is such a thing as a human soul?

*Al.* I do thus infer.

*Soc.* If then you agree that there are certain existing equivalents which would be void of value, unless there were a human soul to be profited by them, and if you are thus led to believe that there is a human soul; and then if you find that this soul refuses, or is ignorant how to appropriate to its own use these equivalents, so that by reason of this

refusal or of this ignorance, such equivalents appear after all to have been furnished in vain, and Nature has come under a disappointment, what seems the only escape from the dilemma?

*Al.* It seems to me we must say of the soul, as we said of the child, that when it is old enough, it will know better and choose better; and since it never is old enough in this, its present stage of being, we must infer that there is another stage of being, having entered upon which, it will understand and make use of these equivalents; and so they, any more than the inferior and cheaper equivalents all about us, shall not appear to have been created in vain, and Nature shall not be found disappointed here, any more than she has been elsewhere.

## BENJAMIN DISRAELI.

THE career of Disraeli is often mentioned as one of the most surprising in English history. The fact that a Jew should have attained a position such as his is regarded as very wonderful. It is thought strange that a member of a class nearly the whole of which were disqualified from representation in parliament should rise to the highest honors of the political profession in England, and should hold for many years the leadership of the aristocratic and conservative party in the state. But it seems to us that too much has been made of the disadvantages of race and of birth and fortune against which Disraeli was compelled to make his way. So far is it from being true that Disraeli's origin was mean, the social position of his father was quite as good as that of the parents of other men who have risen to parliamentary distinction in England. The introduction which the elder Disraeli was able to secure his son in London was one to have been envied. Disraeli, the younger, began life with an eminent and entirely respectable father, with a comfortable income, and, no doubt, with a useful, if somewhat unusual, education. His talents, his conversational eloquence, and his handsome person completed the success for which his accidental advantages had prepared him. That a Jew should have been able to climb to the head of a state in which Jews were still under disabilities was, indeed, surprising and curious. Had Pitt or Canning been told that

his successor would be a veritable Hebrew, he would have wondered what would become of posterity. But it does not follow, therefore, that a Jew, once admitted to the House of Commons, would have found it difficult to assume the position for which his talents fitted him because of the prejudice which would attach to his race. Any member of the House of Commons may speak whenever he can get the eye of the presiding officer. It is not to be supposed that a man who had something weighty or clever and entertaining to say would not be listened to for the reason that the orator was a Jew, any more than that an empty proser would be heard because he was of an old county family. It might happen that the great prizes of office would be withheld from one to whom some kind of odium is attached. But in such an assembly as the House of Commons—an assembly in which a great amount of necessary work has to be performed before the eyes of the world—it would be strange indeed, if in the course of a life-time great abilities would not obtain recognition; it would be strange, indeed, if the tools should not in the end be given to him who proved his capacity to use them.

But Disraeli's career has been a very remarkable one. The career has been extraordinary because he has himself been extraordinary. It is the characteristics of the man which have been extraordinary rather than the outward accidents of his

career. Given such qualities as he has had,—such force of will, such ambition, such want of humor and consequent fearlessness of ridicule; given talents so precisely suited to the life to which his inclinations called him, and which chance opened to him, and we might expect for the lucky possessor of these qualities a great success. Indeed it would be hard to find in these days another career which shows such courage and determination, such a power to look the world down. Disraeli has longed for high places, fame, the recognition of the people who drive past Hyde Park corner, for a career which would satisfy his activities—with a fervor which reminds one of the Old Testament. The accidents of his literary career appear to us much more interesting than those of his birth and station. It is true that his books often contain passages which reveal the force of his judgment and the excellence of his satirical abilities. But they also contain such a mass of gush, nonsense, and ‘talk,’ such an unworldly carelessness of being thought a fool, and such an apparent ignorance of what the world thinks foolish, that it is hard for us to conceive that they are the work of one who has since proved himself to be, of all the eminent people of his time and country, perhaps the most consummate man of the world. In no books is there to be found less of that sneaking caution in expressing the mind just as it is, which a very little commerce with the world teaches. The gush, the nonsense, and the “talk” come straight to the surface. He is not in the least ashamed to express his admiration of the fine houses, fine dinners, and fine manners of the great. And the nonsense and the “talk” are not alone the outcome of his youth. We find him, after having been premier, writing a book full of the same kind of thing which he wrote as a boy. His talents have been so commanding, the force of his will has been such, that he has been able to “carry” these immaturities.

We have spoken of the extraordinary ambition of Disraeli. It is not unlikely that the disadvantages of his birth and station (such as they were) may have spurred him to exertions to attain position and fame which he might not have put forth had he been born to an eminent place. It is natural that the wealth and pride of the great society of London should appeal to the imagination of a young and aspiring man. That society is as proud as any in the world, and perhaps more splendid than any, and yet it is not inaccessible. The

surest passport to it, and to a powerful place within it, is a political career. Society seems contrived for the man who may make a reputation in the House of Commons. Take a young fellow, such as we conceive Disraeli to have been, with immense ambition and an entire belief in all the wealth, rank and state of British society, and we may imagine with what longing he must look forward to the great places of the world. Is it not possible, by the way, that the condition of almost perfect democracy which we have reached in this country will scarcely permit men to cherish such fierce ambitions. No educated young man here can feel that there is any society which is greatly above him. Of course, it is true that ambition is a personal quality and needs but little to feed upon; but it seems to us very possible that one result of democratic society will be to make the ambition of men somewhat less strong and eager.

It will not be necessary for us to say much of a career so well known as Disraeli's. He is now about seventy-two years old, having been born in 1805. He was not as a boy sent to a university, but received his education from his father and from private tutors. He was for a time in an attorney's office, but abandoned very fine prospects as a lawyer to become a writer of books. The novels of his youth, “*Vivian Grey*,” “*The Young Duke*,” “*Contarini Fleming*,” “*Alroy*,” and others obtained a great celebrity, and were translated into many languages. Between 1831 and 1837, he made several unsuccessful attempts to get into Parliament. In 1837 he was finally elected. Disraeli failed in his first attempt in debate, and it was not until ten years later that he gained a strong position in the House. This was at the time of the repeal of the corn laws, when Sir Robert Peel, abandoning the position which his party had held toward the question, himself adopted and carried the measure. Disraeli then made a great reputation by his attacks upon his late chief. We doubt, however, if any of Mr. Disraeli's speeches is quite so well known, or so often quoted as that maiden speech in which he so signally came to grief. The story has been often told, but may be told again a little more at length than it has commonly been given. The Parliament to which Mr. Disraeli was first elected was the first which had been summoned by the present queen. On the day of the opening of Parliament the young queen ascended the throne in the House of

Lord, and read her message in gentle, girlish tones which made a deep impression upon the loyal hearts of those who heard it. In that throng, no doubt, there was a young member of the House of Commons who looked upon the scene with a heart full of hope and exultation. After many failures he had now secured that place for which he had so long been striving; now he was about to realize the expectations with which he had so long looked forward. His friends said that he would not allow many nights to pass without an attempt to produce some effect upon the House. On the 7th of December, just after O'Connell had delivered a most powerful

and elaborately, with his well arranged ringlets clustering over a brow as pale as death, his eyes fixed on the ground, rose and asked the indulgence which was usually granted to those who spoke for the first time. He would, he said, show himself worthy of such indulgence by not abusing it. He began by taunting O'Connell. He then directed two or three taunts at the Whigs, who had made certain very improper intimations at clubs or elsewhere, just at that time "when the bell of our cathedral announced the death of our monarch." He made some daring assertions, which were received with laughter and cries of "Oh! oh!" from the ministerial benches. At an allusion to "men of

moderate opinions and a temperate tone of mind," there was still more laughter, as it was considered that the character referred to was quite the reverse of that of the speaker. The young man entreated the House to give him five minutes hearing,—only five minutes. The House became indulgent for a moment; but shouts of laughter were again heard as Mr. Disraeli went on to explain that he stood there virtually, though not formally, as the representative of a considerable number of members of Parliament—the new members. "Then why laugh?" he asked; "why not let me enjoy this distinction at least for one night?" When however he spoke of the disagreement between "the noble Tityrus of the Treasury Bench and the Daphne of Liskeard," and mentioned Lord John Russell as waving in his hand the keys of St. Peter, the voice of the young orator was drowned in the merriment of the House. The laughter was renewed more loudly, as



THE AUTHOR OF "VIVIAN GREY."—FROM SKETCH BY D. MACLISE, N. A.

speech upon the Irish Elections Petitions, and when the House was in a state of great excitement, a young man of singular appearance, dressed as the tradition is, very pro-

he ejaculated with despair,—“Now, Mr. Speaker, see the philosophical prejudice of man!” Presently he said pathetically,—“I would certainly gladly hear a cheer,



even though it came from the lips of a political opponent." No cheer, however, followed, and he then added,—“I am not at all surprised at the reception I have ex-

perienced. Moreover, the House was not prepared to applaud a young member who indulged himself in the use of such personalities.



THE AUTHOR OF "LOTHAIR."—FROM SKETCH BY JOHN GILBERT.

perienced. I have begun several times many things and I have often succeeded at last. I will sit down now, but the time will come when you will listen to me!" He sat down, and Lord Stanley, on behalf of the opposition, replied to O'Connell; for it was thought that O'Connell's speech had not been answered. Several explanations of this failure have been attempted. It has been thought by some that this maiden speech was in the bombastic style of Mr. Disraeli's novels, but the speech was not specially bombastic. The House was yet

remembered. Moreover, the House was not prepared to applaud a young member who indulged himself in the use of such personalities.

This was in 1837. After this first signal defeat Mr. Disraeli became very quiet. He spoke but seldom, and then modestly. It was not until nearly ten years later that he reached full distinction as a parliamentary orator. He followed during these years the lead of Sir Robert Peel. Peel, however, distrusted his erratic disciple, treating him coldly. When, at the time of the repeal of

the corn laws, Peel accepted this measure, it became Disraeli's opportunity. He attacked Sir Robert in a series of speeches of extraordinary bitterness and pungency, and these attacks received the applause of the Tories, who, of course, resented the defection of their leader.

It is very interesting in looking over the periodic literature of any time to mark the growth of the fame of men. The changes in the tone of the newspapers and magazines from year to year are very noticeable in Mr. Disraeli's case. The number of "Fraser's Magazine," May, 1833, from which our first picture is taken, contains also a little essay upon him, which opens as follows: "O reader dear! do pray look here, and you will spy the curly hair and forehead fair, and nose so high and gleaming eye of Benjamin D'Is-ra-el-i, the wondrous boy who wrote 'Alroy,' etc., etc. This was supposed to be in the style of "Alroy." But in 1847, after Disraeli had become a member of the House of Commons, and his attacks upon Peel had turned the eyes of the country upon him, we find a writer in the same magazine speaking of him in a very different strain. Contrasting the keenness of the man to all going on about him, which is evident in his speeches, his writings, and his acts, with the torpor of his appearance, he says: "See him when you will, he glides past you noiselessly, without being apparently conscious of the existence of externals, and more like the shadow than the substance of a man. When he is speaking he equally shrouds himself in his own intellectual atmosphere. You would think he paid no regard to the thought of whom he was addressing, but only to the ideas he was enunciating in words. Still with downcast eyes, still with what may almost be called a torpor of the physical powers, he seems more than an intellectual abstraction—a living man of passions and sympathies. If some one of his friends interrupts him to offer a friendly suggestion, or to correct a misstatement of facts, the chances are that he will not notice him at all, or if he does, that it will be with a gesture of impatience, or with something like a snarl. This singular self-absorption betrays itself even when he is in a sitting posture. You never see him gazing around him, or lolling back in his seat, or seeking to take his ease as other men do in the intervals of political excitement."

This is a very good picture of Disraeli as he yet appears. He was accustomed to sit

in his place in the House of Commons with the gravity of an Indian chief in council. George Eliot, in her latest novel, speaks of the "vivid gravity" of her Jew hero. The words so well describe Disraeli that it would almost appear that his countenance must have given her the suggestion.

We have referred above to the opening of Parliament by the young and new-crowned queen in 1837, and to the feelings with which a certain young member must have looked upon that scene. The same queen opens Parliament in 1877, just forty years later. She does not now read her message; an elderly woman in feeble health, the paper is recited for her by the Lord Chancellor, who stands by her side. Some of the characters are the same, but in appearance they are greatly altered. The scene brings to mind some of those plays in which the action covers a long period of years, such as "Elizabeth." Elizabeth, who but an hour before had been a young and vigorous woman, falters feebly upon the stage, holding by the arm of Cecil,—Cecil, now gray and tottering, who but an hour before had been the hale and portly counselor. At the recent opening of Parliament, many eyes glanced curiously about in search of a well-known figure. The once young member had been made a lord. Everybody was looking for him, and yet not one in ten of the crowd recognized him. The new peer stood at the side of the Queen, holding aloft a large sword. So covered was he with his trappings of state, that a portion of a very old and wrinkled face from which a pair of brilliant eyes looked out was all that was to be seen of him.

There is an impression that Disraeli's career has been a selfish one. Mr. Disraeli has been, perhaps, no more selfish than most other men. His aim has been to find and follow that career which his activities craved; he has sought more successfully than most other people the objects of his desire, and this is perhaps all that may be said. But it is obvious that we do not look upon such a career as his with quite the same feelings with which we regard that of a Falkland or a Pitt. We admire and wonder that, in this world of failures and half successes, a man should be able so completely to reach his mark. But the mind is not stimulated, or the sympathies aroused by such a spectacle, as when we see statesmen strongly impressed with love of country, or with devotion to the progress of mankind, or gallantly struggling for great public objects.

## SOMETHING ABOUT HORSES.

NOWHERE among domestic animals do we find such ungainliness, awkwardness and misproportion as in the colt. His stilted legs, short body and diminutive neck, hardly suggest the possibility of good equine development. His hair is coarse, his tail and mane are stubby, and his gait is, to the last degree, awkward. But although not born beautiful, the colt is born to beauty, and every month of his development, until full maturity, is marked by increasing grace and improved proportion. Nature is far from being an attentive mother to the horse, as is attested by the coarse, rough coat of the wild specimen, which, with his undeveloped form, gives him more the look of an awkward donkey than that of the noble steed as we know him in our stables. The horse which claims our admiration as a thing of beauty and of power owes very much to the refining touch of man, exerted by slow degrees through countless generations; and a thousand years of care and attention have given us at last an animal combining strength and grace, endurance and agility, courage and gentle-

cost an incalculable outlay of study, labor and treasure.

The horse-breeder seeks to produce an animal with a well-formed head, ears well proportioned and inclined to move in harmony with each other, a broad and gently arched forehead, large, clear eyes, with lids that close well over them, broad, open nostrils, lower jaw not too large, and frothing mouth, with thin, delicate lips. The neck must be well modeled and muscular, but not beefy, and the mane fine and straight. Difficult as it is to unite all these physical qualities in the horse, almost greater claims are made on his intelligence and courage. He must combine fire and gentleness, fearlessness and kindness, with mettle and docility.

When the fortunate owner has secured this perfect specimen of horse-flesh, he still finds great drafts upon his attention and care. Every appointment of stable and stall must be perfect, the temperature regulated by the thermometer, and food, drink, grooming and exercise must be administered with the most regular precision. The horse is blank-

eted with numerous layers, more or less according to the changes of the weather. His exercise is made to conform to fixed rules, and when he travels over long distances, his journey must be made by rail. In England, where a vast number of valuable horses are congregated, and where, especially among fox-hunters, the transportation of horses by rail is very common, there are provided at every considerable station regular cars for horses, each containing three narrow stalls. These cars are attached even to the fastest express trains, so that the fox-hunting squire may go fifty miles to meet the hounds, and return comfortably by dinner-time.

On the race-course, the drive, or the parade, the noble animal is expected to return,

in one form or another, a full consideration for the skill and expense that have been bestowed upon him. Even among the most extravagant horsemen, whose disbursements



DEMOCRACY VERSUS ARISTOCRACY.

ness, in such a degree that it may be truly said that masculine and feminine beauty are here united in one being. To reach this perfection, and to retain it when reached, has

in their stables are unlimited, so rare is a real personal affection for the horse the controlling motive, that when he loses his valuable qualities, he is at once remorselessly discarded, and relegated to the lower walks



THE CARPATHIAN FOUNDLING.

of equine life and usefulness, usually to end his days in the greatest hardship and degradation. The poor man, who lives in closer communion with his domestic animals, and often owes his means of subsistence very largely to them, acquires through more constant intercourse a heartier love for his horses,—a love which leads him to cherish his beast long after his usefulness is passed.

The mountaineers of the Carpathian range show an affection for the horse, and an intimacy with him, such as are seen perhaps nowhere else. The delicate and affectionate little animal is to the family what the doll is to the child. Hardly larger than a good-sized mastiff, this horse becomes in a certain measure the house-dog of the family, and lives under the same roof, if not, indeed, in the same apartment. What the father,

mother and children have to eat they freely share with him, and they are, indeed, more liberal in showering their love upon their cherished quadruped than upon any other of their domestic animals. The little horse returns their affection, nestles his delicate head in the bosom of his protector, plays gently with his children, and allows them to fondle him at will. He is also an extremely useful member, literally sharing in the necessary labors of the farm and in the road service. He and his master, yoked together, form the team which drags to market the winter's product of wood. When the load is light or the wagon empty, the horse draws the burden alone, but whenever needed, the human shoulder is bowed to the yoke. This docile beast knows neither bit nor curb, whip nor rein. The intelligent animal needs no guidance except in case of difficulty or doubt, and then he always waits for a suggestion from the beckoning hand or help from the stout arm.

The Swedish peasant is less affectionate toward his small, thick-bodied, chuckle-headed and long-haired pony, which is driven out in the autumn, and for half the winter seeks his scanty and sorry forage on the plain. With his fore-feet he scrapes away the snow, and nibbles the moss, which cracks between his teeth like brittle glass. Until the most severe weather comes on, this animal is brought home only for domestic work, and to perform the occasional post-coach service for travelers. In Sweden the passenger transport is a jealously-guarded prerogative of the peasants, who have the right to perform the service in regular rotation. If the so-called "extra post" arrives at a post-station, the postilion whose turn for service it is, and who is often a sturdy peasant girl, mounts her horse (astride),



A SWEDISH POST.

gallops to the station like a man, has the animal harnessed to the vehicle, and gives the traveler the reins,—for carriage and sled are both too small for two persons, and every traveler is his own coachman, and he bears his own whip, often armed with a sharp nail. The horse starts off at a smart trot, the girl running briskly at his side. She frequently keeps pace with him for miles, falling behind only when he is urged to a gallop. Even then she trots on briskly to the next station, where she is sure to find her beast at the post-house, dripping with perspiration, and awaiting his owner. Mounting again, she gallops mercilessly home with the price of her horse's service in her pocket.

The little Swedish horse seldom shortens pace from a trot or a gallop, but the heavy beast of Belgium and the Rhineland almost as seldom indulges in either of these gaits. These lowland animals are of almost elephantine proportions, and when at work on the road, they follow with careful tread the well-selected track of their leader. So unaccustomed are they to any other guidance, that their great freight wains would be in grave danger if the teamster were elsewhere than at the head of his team, marking the course they are to follow. Though these heavy animals show no skill under the rein, they are all the more reliable without it, stepping with the greatest care almost in the very footsteps of their leader. On steep descents, without the rein to hold them back, they throw their great weight in the harness, almost sitting on their haunches, to prevent the heavy wagons from descending too rapidly. This horse passes his life in conscientious labor, but the gentle relation existing between the Arabian or Carpathian horse and his master is here little known.

The horse of the steppes of southern Russia can scarcely be called a domestic animal at all. He never enters a house and seldom comes under a roof, but roams about in great herds. It is customary to keep among them a few powerful stallions, one of whom is the leader of the rest, and which together govern the whole community. The ruler among these stallions gains his supremacy not by the peaceful methods of selection, but by the right of conquest. When a new stallion comes into a herd, its

ruling lord approaches him with pride and dignity. With bristling manes, lofty tails and gleaming eyes, they slowly draw nearer and nearer until they can stretch out their necks for that momentary touch needed to the interchange of thought among horses. Suddenly one of them screams, turns sharply around, and flings his hind-feet high in the air. Were the blow to strike, it would be fatal, but the other is on his guard, and turning as quickly as his opponent, performs the same antics, which they both seem to understand as throwing down the gauntlet, which is to be followed by nearly mortal combat, to be carried on almost with the teeth alone. Turning face to face, they rise on their hind-feet and seize each other's



THE HORSE OF THE LOWER RHINE.

necks and crests with their teeth, tearing away shreds of flesh and skin, and inflicting wounds which leave bald scars for life. The wild scream bears no resemblance to the accustomed neigh. It is a shrill cry, which penetrates bone and marrow, ringing far away like the blast of a trumpet. The struggle is kept up sometimes for hours, until one of the animals, exhausted, turns tail upon his foe. The victor, satisfied with this declaration of defeat, closes the contest, and marches quietly to the head of the herd, where he is recognized as master, the vanquished opponent following in the common herd without again pressing his claims





A STRUGGLE FOR LEADERSHIP.

for championship. This struggle for the equine belt is the only serious hostility that arises among them, for these horses of the steppes are quite peaceable among themselves, and neither shy of man nor hostile to him. Their owners walk among them as among a flock of sheep, but the horses do not permit themselves to be touched. They do not resent the attempt, but merely move beyond reach.

The method of catching and breaking these horses for sale is quite peculiar. When the purchaser has pointed out the animal he desires, and the price has been agreed upon, he is asked whether he will have him broken or wild. If broken, he must pay for the trouble, which is often not slight, especially as the horse is to be delivered either on the same day, or early on the day following. The seller, armed with a rope made of hemp and horse-hair, with a large noose at one end, mounts a tame horse, and rides slowly into the herd. The rope is seemingly fastened to his left leg, and the noose is dropped

on the ground near the chosen horse in such a way that he will step into it with his hind-feet. This being done, the horseman quietly draws the rope taut and rides quickly around the captured horse, and, entwining him in the rope, throws him to the ground; assistants immediately take possession of him, annoy him, and prevent his rising. After a few useless efforts to escape, he yields and submits quietly to his fate. While lying down, he is bitted, bridled, and saddled. This being effected, one of the assistants bestrides him, and the others ply the thong. The horse is released, and, rising with his unusual weight, terrified by the blows and by his rider, flies over the uninterrupted plain with the speed of the wind, the horseman letting him rush on where he pleases. At length, strength, breath and mettle give out, and he would gladly halt. Then the whip is applied, and he is urged to further efforts. As often as his pace slackens, he is goaded on, until, at last, utterly exhausted, he sinks to the ground, helpless to move

another step. Panting, groaning, covered with sweat and foam, trembling in every limb, with distended nostrils and heaving flanks, the poor beast loses all power and courage. The rider now dismounts and handles his steed by the ears, by the feet, or by the tail, with a freedom which would have cost him his life an hour before. The disheartened brute moves never a muscle, but allows himself to be bridled and unbridled, saddled and unsaddled, and mounted at pleasure. He is trained and taught the fundamental lesson that he is henceforth to submit to one mightier than he.

As a rule, the horse is a kindly and good-tempered beast. He is malicious only when made so by the brutality of his keeper, or when he has inherited the malicious quality due to the ill-treatment of an ancestor. The hereditary vice, once established, becomes almost ineradicable.

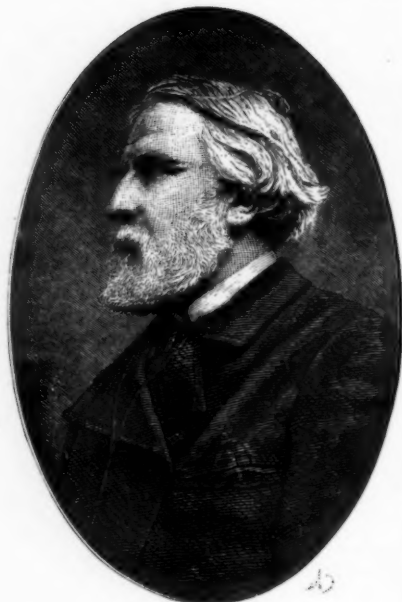
The degree to which the temper of the horse is influenced by the treatment given him by his attendants, was curiously illustrated in the case of a certain Bohemian baron, whose stud had the reputation of producing only the most vicious brutes. He

was cursed with a race of grooms imbued with a thoroughly devilish spirit. These men gloried in making bad worse, by teasing and tormenting their animals until the stables became a veritable bear-garden. As a consequence the stud lost its reputation, and the baron found that he was raising horses for a steadily falling market. Realizing the cause of the growing evil, he swore vengeance against his grooms, and dismissed them *en masse*. In their stead, he employed a party of peasant girls, who, though they may have lacked the fine pastoral qualities of the peasant beauties of Watteau, were a vast improvement on the brutal men whom they displaced. Matters rapidly grew better in the stables, and the whole stud became in time gentle and kind. While the men had treated the malicious beasts with cruelty, and found pleasure in irritating their tempers, the girls treated them with affection. They coyed and played with them, accustomed them to affectionate tones, and always treated them kindly. In this way they gained their goodwill, and instilled into the rising race a new and more gentle spirit.



THE RUSSIAN HORSE-BREAKER.

## IVAN TOURGUÉNEFF.



IVAN TOURGUÉNEFF.

In an age so hostile to type as our own, it is quite a relief to encounter an individuality so strongly marked, so athletic, and, in spite of all appearances, so intensely national, as that of Ivan Tourguéneff. We may quarrel with his views of life; we may disapprove of his pessimistic philosophy; but, for all that, we feel the fascination of a powerful personality; we feel the pulse-beats of a strongly agitated heart, infusing its warm life into every word and sentence he has written. To be sure, to a superficial observer he always remains cool; he never loses his self-possession; but through all these smooth and severely realistic narrations there runs a hidden vein of fire, and we often perceive how the author's blood is boiling, while his eye remains clear, and his hand firm. It was this which all Russia felt when the "Memoirs of a Sportsman" boldly tore the veil from her eyes, and displayed, in detached and carefully executed pictures, the melancholy panorama of serfdom, with all its revolting cruelty and wretchedness. And still Tourguéneff nowhere assumes the attitude of a critic, and, as an artist, he shows no fondness for strong contrasts and glaring

colors; he never indulges in philosophical comments upon the social problems of his country, and, as far as we know, he has never directly, in so many words, expressed his disapprobation of the institution of serfdom. Nevertheless, the reader is not for a moment left in doubt as to his real sentiments; the pictures he has drawn speak for themselves, and they speak with no equivocal meaning.

It is not probable that Tourguéneff began his literary career with any conscious moral or social purpose. If, in a certain sense, he may be called a philanthropist (for his heart beats warmly for his kind), the rôle of a professional reformer seems utterly foreign to him. To be more explicit, a reformer is always primarily an idealist; he views his subject abstractly, and, in case he is a writer, constructs his plot, with all its minor machinations, in conformity to some leading purpose which he wishes to accomplish. With Tourguéneff, the moral tendency is not the leading motive; his works would have the same right to be, even if they had no bearing upon the social abuses of the day. As an artist, he takes a keen delight in reality for its own sake; he notes with unerring accuracy every characteristic detail; and then, calculating the finest *nuances* of shade and color, fashions his plot so as to bring these details into their proper relief and proportion. But this very reality which he portrays is so deplorable that no man can fail to see the need of a reform; and in so far as Tourguéneff held up before the Russian public, and especially before the Russian Czar, a mirror in which the social condition of the country was clearly reflected, he may be entitled to the name of a reformer.

Tourguéneff has the honor of having first made the world aware of the fact that Russia has a literature distinctly her own. At least a dozen writers of considerable talent had appeared before him; but the rigid censorship and the persecutions of the Government, which always showed itself hostile to every independent literary movement, had embittered their lives and strewn their paths with thorns. Lermontof, the author of "A Hero of Our Time," was banished to the Caucasus, where he was killed in a duel; Pushkin had a similar end; and Gogol went into voluntary exile, and, on his return to Russia, put an end to his own existence.

Indeed, the annals of Russian literature are so fraught with tragic incident as effectually to discourage even the bravest from pursuing so dangerous a calling. No wonder, then, that Tourguéneff, who, like so many of his brother authors, began his career with banishment, finds no reason for sanguine predictions in his portraiture of Russian society. A nation like his needs to be told the truth at all risks; optimistic flatteries may make an author popular, but they have no healthy effect upon his public, while a sincere, outspoken pessimism, when combined with innate strength, may rouse it from its torpor and stimulate its latent energies.

The leading events of Tourguéneff's life have recently been presented to the public in various magazine articles; but a brief review may still be in order. He was born November 9th, 1818, in the Government of Orel, in the interior of Russia. At the University of Moscow, which he entered at an early age, his democratic tendencies attracted a good deal of attention among his fellow-students. Whether at that time he sympathized with the nihilism which he has so strikingly characterized in "Fathers and Sons," we do not know; but, if we remember rightly, he took a strong interest in the doings of the American Republic, and felt quite proud of his familiar surname, "the American." Having finished his university course, he went abroad, studied German literature and Hegelian philosophy in Berlin, and, in the year 1841, returned to Russia, where he published a small volume of poems, under the title, "Panasha." During a five years' sojourn at home, he still further familiarized himself with the characteristic features of Russian life, wrote sketches and stories for the reviews, and, during his leisure hours, occupied himself with hunting, fishing, and other athletic sports. In 1846, he once more betook himself to foreign lands, and thenceforth devoted himself exclusively to literature. It was about this time that the "Memoirs of a Sportsman" appeared,—first in fragments, scattered through various monthly magazines, and afterward in book-form. The separate sketches had attracted considerable attention for their brilliancy of style and their many glimpses of deep psychological insight; but the vast effect the book was to produce was, no doubt, a surprise to the author himself. It appears now well nigh a truism to say that its publication is the most noteworthy event in the history of Russian literature. The Czar has himself admitted that it was the reading of these

"Memoirs" which first opened his eyes to the demoralizing influence of serfdom, and thereby hastened the act of emancipation. This, however, did not by any means imply that he recognized Tourguéneff's right to open his eyes; and, as soon as a pretext was furnished by the publication of a eulogy on Gogol, the bold truth-teller was, by imperial command, banished from the capital, whither he had lately returned, and confined to his estates for an indefinite period. To be sure, it was the late Emperor Nicholas who was immediately concerned in the act of banishment, and it was his son Alexander who abolished serfdom; but the latter, although at the end of two years he again set the author at liberty, did effectually nothing but commute the sentence. Probably it is not altogether from free choice that Tourguéneff has spent the last twenty years in exile; and, if we are not mistaken, he has even now to obtain the permission of the Czar whenever he wishes to pay a visit to his native land. At present he makes his home with the family Viardot-Garcia in Paris; but his independent fortune enables him frequently to indulge his taste for traveling, and he has spent a considerable portion of his life in London, Rome, Florence, and Baden-Baden. The Russians are proverbial for their facility in acquiring foreign languages, and Tourguéneff is no exception to the rule. He expresses himself almost with equal ease in English, German, and Italian; and French he speaks and writes as if it were his mother-tongue.

The works of Tourguéneff are so numerous that we are at a loss to know which to select as the fittest illustrations of his style and manner. The "Atlantic Monthly," the "Revue des Deux Mondes," and the foremost German critics,—among them Dr. Julian Schmidt,—have hailed him as one of the greatest, if not the greatest, of living novelists, and we are not disposed to quarrel with their verdict. His only rival is of course George Eliot, the reach of whose intellect is as large and whose sympathies are as catholic and all-embracing. Nevertheless, there are certain types of character—especially types of women—which the English authoress can only reach in an overstrained attitude, while the athletic stature of the Russian enables him to observe with artistic ease. George Eliot is an inspired critic, and accordingly with her the didactic tendency predominates over the *schaffende Freude*, as Goethe terms it,—the purely artistic joy of creating.

Tourguéneff never condescends to act the showman; he has no ambition to excite our admiration of himself personally, or of the skill of his workmanship. When his drama is finished, he does not rise in his box and bow to the applauding public. To us there is something truly grand in this total self-forgetfulness, and it gave us in a measure the key to the author's character, even before a single fact of his life had become known to us. And when at length we penetrated this brazen wall of impersonality with which his perfect art has surrounded him, and actually stood face to face with the great novelist, we could not rid ourselves of a certain sense of victory, not unlike what the prince of the fairy tale must have felt, when the century-old hedge of thorns gave way and opened him access to the castle of the Sleeping Beauty. Tourguéneff is a man of stately presence, as you would expect in a nobleman; his frame is large, well-knit, and finely proportioned. His eyes are of a clear grayish blue, and they beam with kindness and benevolence; the brow is prominent; the nose straight and well chiseled, and the *ensemble* of the features somehow reminds you of a noble and spirited horse. His hair is iron-gray or nearly white, and he wears a full beard.

Some five or six of Tourguéneff's novels have been translated and published on this side of the Atlantic, and are presumably known or, at least, accessible to most of our readers. They are all somber in tone, and the *dénouement* is invariably tragic, which is in itself a sufficient reason why they can never appeal to the large mass of novel-readers, and never become popular in the widest acceptance of the term. But that limited public to which they directly appeal values them, not merely as a source of entertainment, but rather for their profound and vigorous expositions of the vital problems of life; and by their sincere loyalty to the author's genius, his readers compensate for their deficiency in number.

In the novel "Fathers and Sons," Tourguéneff, with the accuracy of a surveyor, sounds and measures the gulf which separates the new generation from the old, but he makes no attempt to bridge it. The problem is concentrated in the two typical characters, Paul Petrovitch Kirsanof, the stately pedantic nobleman who clings to the old *régime*, and Eugene Bazarof, the nihilist who believes in nothing but matter, and roundly condemns all that the former generation has revered, as moonshiny ro-

manticism and useless abstractions. The physiognomies of both are drawn with scrupulous impartiality, and with a calm mastery which is Shaksperian. Bazarof is spending his summer vacation with his friend, Arcadi Kirsanof, on the estate of the latter's father, Nicholas Petrovitch. Arcadi is still a novice both in science and in materialism, and with the enthusiasm of a warm, but intellectually inferior nature, echoes his friend's opinions. The following conversation clearly states the problem:

"'Aristocracy, liberalism, principles, progress,' repeated Bazarof. 'What strange words in our language, and perfectly useless! A true Russian has no use for them.'

"'What does he need, then, according to you? To understand you, we are outside of humanity, outside of its laws. That is too much. The logic of history exacts—'

"'What need have we of that kind of logic? We can get on very well without it.'

"'How?'

"'Ah! Look here. I think that you do very well without logic in putting a piece of bread in your mouth when you are hungry. What is the good of all these abstractions?'

"Paul Petrovitch raised his hands. 'I do not understand you at all! You insult the Russian people. I don't understand that one can help recognizing principles and rules. What, then, directs you in life?'

"'We act in view of what we recognize to be useful,' replied Bazarof; 'to-day it seems useful to us to deny, and we deny.'

"'Everything?'

"'Everything.'

"'How! not only art, poetry, but even—I hesitate to say it?'

"'Everything,' repeated Bazarof, with inexpressible calmness.

"Paul Petrovitch looked at him fixedly; he did not expect such a reply. Arcadi blushed with pleasure.

"'Allow me, allow me,' interrupted Nicholas Petrovitch; 'you deny everything, or, to speak more exactly, you destroy everything. \* \* \* Notwithstanding, it is also necessary to rebuild. \* \* \*'

"'That does not concern us. \* \* \* It is necessary in the first place to clear off the ground.'

After the departure of the nihilistic friends the conservative Nicholas exclaims: "'Our successors! Do you know, brother, what recollection this brings back to me? One evening I was disputing with my mother; she cried out and would not listen to me



\*\*\* I ended by saying to her: "You cannot understand; we belong to two different generations." These words wounded her deeply; but I said to myself—"What can I do? The pill is bitter, but it must be swallowed." In our turn now, our successors can say to us also: "You are not of our generation—swallow the pill.""

The reader will notice what a fertile field a theme like the present offers for startling complications and profound psychological studies. The nihilist of course looks upon himself as a mere machine,—as a kind of automatic furnace. He denies the existence of sentiment, and when at length the sentiment of love asserts itself in him, as it will in every human life, the story gradually gathers strength, until it rises into tragic height and dignity. How desperately he grapples with his fatal passion; how vain his endeavors to shield himself behind a wall of negations, and how stubbornly he at last succumbs, not to his love, but to a sterner force—to death.

No less masterly as a story, although equally dismal, is that exquisite piece of mosaic,—*"A Correspondence,"* which contains within its narrow frame well-nigh every conceivable shade of epigrammatic wretchedness. At a hotel in Dresden the author makes the acquaintance of a young Russian, Alexis Petrovitch, who is dying inch by inch of consumption, and who, shortly before his death, bequeathes to him a package of letters from which the story purports to have been drawn. Alexis had in his early youth been in love with the sister of a certain Maria Alexandrowna, who had in her turn been engaged to a cousin of his. But both engagements are broken: the cousin marries somebody else, Alexis goes abroad, and Maria retires into the country where she lives a quiet uneventful life among very commonplace people. In an idle moment Alexis sits down and writes to her; he is weary of life, discontented with everything, but longs to pour his misery into some sympathetic ear. His letters teem with acute reflections on Russia and the Russians; and if, as the author evidently intended, we are to regard him as a typical Muscovite, we need no longer wonder that Russia has spent so many centuries in a state of Asiatic torpor, showing apparently little or nothing to the progress of human civilization. We find Alexis in an attitude of perpetual self-contemplation, holding, as it were, a mirror before his mind's eye and

morbidly analyzing every passing emotion of his own soul. And we are led to believe that this is the normal and not an exceptional phase of the Muscovite character. "We Russians," says the letter-writer, "have no other object in life than for ever to dissect our own personality, and hardly have we outgrown our childhood before we begin with it. We receive no decided impulse from without, we revere nothing, believe in nothing thoroughly, and thus we have free choice to make of ourselves whatever we please."

\*\*\* While we unite in ourselves the faults of all ages, we at the same time deprive these very faults of their good and redeeming side. We are stupid as children, but we are not so sincere as they; we are cold-blooded as old men, but we lack their prudence. \*\*\* But, to be sure, for this very reason we are psychologists! Oh yes, we are great psychologists! Only, our psychology unfortunately often assumes the character of pathology. \*\*\* This refined study of the laws of our own diseased souls, and of our sickly mental development, with which healthy men are never wont to occupy themselves. \*\*\* The truth is, we are never young, not even in our youth."

Maria has in times past felt a great interest in Alexis, perhaps even loved him; she answers his letter, rebukes his indolence and indecision, and tries to inspire him with fresh courage by contrasting his fate with her own.

The correspondence with every letter grows more intense and we seem to notice how the turbulent phrase, confined within the straight-jacket of epistolary conventionalism, struggles to relieve itself of its burden of meaning.

Maria is a sweet, refined and womanly nature; she is already past her first youth, and the crisis she has been through, without leaving any bitterness in her soul, has turned it to reflection and fostered a certain brooding disposition of her mind. The neighbors have nicknamed her "The Philosopher," and it is told that she sleeps at night with a Latin book in her hand, and spectacles on her nose. The wit of the parish asserts that he has heard her say "George Sand," instead of "good morning," and that she drinks moonshine with her coffee instead of cream. However that may be, she writes very charming letters, and the thought gradually grows upon her correspondent, that she might be the one to give color to his pale existence and a purpose to his aimless

life. He writes that he desires to see her, and fixes the day when she may look for him. The day arrives but not he; neither does he attempt to explain his failure to keep his promise. His silence makes Maria anxious; she writes repeatedly in order to ascertain his whereabouts, but she receives no answer. Then at last, nearly two years later, Alexis writes to inform her that he is dying. Just as he was setting out on his journey to the province, he had met a danseuse, a low and vulgar creature, but of a magnificent *physique*. In spite of reason, duty and honor, he loved her to desperation, and, as her lover, followed her from city to city, wherever she went. One chilly winter night while he was waiting with her shawls outside of the theater where she was dancing, he caught a cold which rapidly passed into consumption; and now his days were numbered.

We may say that his conduct was weak, unmanly and disgraceful, as no doubt it was, but we will still listen to his justification: "Do you remember," he writes, "how frequently we discussed the nature of love and how ingenious were our theories on this subject. In practice, however, it turns out that true love is a feeling which, on the whole, does not at all harmonize with the picture we drew of it. In fact, love is hardly a feeling at all, it is a disease; a peculiar state of body and soul; it does not develop gradually, it is simply there! \* \* \* Usually, it takes possession of a man, unbidden, suddenly, against his will, as the cholera or the fever. \* \* \* In love there is no equality, no so-called free union of souls, or of any of the other abstractions, which German professors have invented in their hours of leisure. No, in love, one party is a slave and the other is lord; it is not for nothing that the poets speak of the chains of love. \* \* \* Oh yes, it is a chain—and the heaviest of all. This, then, was my fate! In my early youth, I wanted to take the heavens by storm. Then it occurred to me to get up an enthusiasm for the welfare of the race and of my country. This also lasted for a while. Finally I began to think of founding my own domestic bliss. \* \* \* I stumbled over an ant-hill and fell to the earth, nay, fell into the grave. What a remarkable talent we have for dying in this way, we Russians!"

Thus the story ends and the reader may be pardoned for feeling indignant at having been cheated out of a happy *dénouement*, in a moment when it seemed almost inevitable. However, a great author we must accept for

what he is, instead of quarreling with him for not being what we would like him to be. And Tourguéneff's public, being convinced of his greatness, knows that his pessimism is part of himself, and no mere mask worn for the occasion.

The experiences of a man's life, in connection with his own native temperament, fashion his philosophy, and we can hardly upbraid him, because his lot was cast amid circumstances which tended to make sadness the pervading tone of his mind. Moreover, the poet, having a more sensitive organism than the majority of his kind, feels more keenly the sultriness of the atmosphere he is breathing, and his watchful ear perceives sooner the distant mutterings of the tempest. And no one who has at all listened to the pulse-beat of the feverish life of this century will deny that there is a very perceptible under-current of sadness beneath its bustling and agitated surface. At all events, in the old world, the profoundest thinkers are aware that there is something which is radically wrong, and still they love and cling to the old institutions which they know to be doomed, and view with suspicion the new movements the justice of which they are forced partly to admit. Whether the wide-spread rebellion of scientific men against the Christian religion upon which our whole civilization is founded, and the ever recurring strikes and socialistic tendencies, so prevalent among the working-classes, augur a revolution or a peaceful overthrow of the old forms of thought and government, is difficult to tell. The new philosophy, whether it be Schopenhauer's or that of Herbert Spencer or Stuart Mill, it must be admitted, is excessively dreary. And the very fact that we are, in a measure, compelled to recognize its claims, can hardly fail to fill a reflective mind with regret and tune it to sadness. Tourguéneff, as his "Fathers and Sons" and "Roudine" will testify, has drunk deeply of this modern philosophy; as a young man he spent several years in Germany at the time when the long neglected Schopenhauer was being unearthed and rose to sudden popularity, and his later personal history has not been qualified to foster in him a cheerful optimism, even if the bent of his temperament had been in that direction. We have his own authority for making this assertion. In a letter of May 14th, 1874, referring to an article by Mr. Henry James, jr., in the "North American Review," he expresses himself in the following manner: "Mr. James is cer-

tainly right in reproving my rather gloomy mood, but perhaps it is not quite my own fault, and, most certainly, it is not voluntary." Although by conviction a democrat and as such deeply concerned in the great movements of the day, nature evidently meant him for a conservative, and the problem of the century has thus found a living embodiment in him.

There is one phase of the novel literature of the day which English and American critics seldom deal with, and for which the English language, to our knowledge, has no adequate term. It is what the Germans call *die kulturgeschichtliche Bedeutung des Romans*,—its significance as an element of social history, as a document from which the historian of a later age may reconstruct the society of to-day. In this respect a truly great novel is far more valuable than a dreary chronicle of battles, statistics and diplomatic negotiations. The whole vast life of the century is concentrated in the great poet's or novelist's heart, and pulsates and throbs in every line of his writings. Our social life, our modes of thought and feeling, and even our religious convictions, are undergoing rapid changes, all of which are but imperfectly portrayed in diplomatic protocols and in the records of historical societies, and the time is not distant when our descendants will look to the novels of Thackeray, George Eliot and Spielhagen for the evidence of what we have been, rather than to the works of some professional scholar, unless, indeed, he draw his material from the same sources. Tourguéneff has in this way, perhaps unconsciously, become the historian of his country. The universality of his nature, his severe realism and his keen eye for the typical qualify him admirably for such a mission. He shows no predilection for any special type of character, and if we are at times struck with a certain family resemblance in his heroes, it is not because his power is limited, but because his heroes are all Muscovites, and consequently subjected to the same national and moral influences as the people which furnished the models. Lavretsky in "Liza," Litvinof in "Smoke," and Ssanin in "Spring Floods" are all first cousins, all slight modifications of the same type, kind-hearted and amiable young men, impulsive and at the same time irresolute, externally polished but with a latent vein of barbarism, a most curious commixture of the stoic and the epicurean. Fustof in "The Forsaken," and the anonymous story-teller in "Assja," although

differing in their personal attributes from the heroes of the above-named tales, act under similar circumstances very much in the same fashion. Here, to be sure, is a hint of a limitation, but it is merely an apparent one. Taken as a whole, Tourguéneff's writings reflect truthfully, but in a condensed form, the society which he has undertaken to depict. He proportions the psychological contents of his novels only as nature herself has proportioned them in the life of which he is the observer, and the frequency of this or that type only indicates that Russia of to-day furnishes this type in special abundance. That the range of his vision embraces characters of widely varying molds, not excluding the noblest embodiments of moral dignity, we may easily convince ourselves; we choose at random Ellen and Insaroff in the novel "On the Eve," and that strong and lovable maiden whose serene presence so beautifully illumines the pages of "Liza."

Tourguéneff's studies of women are inferior to those of no other novelist. He opens to us a long and rich gallery, containing almost every conceivable variety of character, from the loud, heartless coquette to the silent, heroic sufferer who endures exile, poverty, and the loss of all for the sake of him on whom she has bestowed her love. But the accessories and the background of his pictures are always painted with the darkest colors. Now we find, as in "The Ant-schar," "Faust" and "Roudine," a coy and artless maiden who lavishes all the affections of her young heart upon a man who is utterly unworthy of her; now again, as in "Smoke," "Spring Floods," and "A Correspondence," the victory of a lawless passion over a pure love; and in some instances it is the stern hand of fate which seizes the lovers in its iron clutch, at the very moment when their hopes seemed on the verge of fulfillment. Liza, by a long life of renunciation, expiates a few brief moments of happiness; for the faithless wife of Lavretsky, whom he supposed to be dead, suddenly makes her presence known, and their blissful illusion bursts as the bubble on the sea.

Tourguéneff is especially a virtuoso in the portrayal of those baleful beauties whose fair, bacchanalian forms haunt the upper regions of French and Russian society. Queen among them all is that dangerous enchantress, Maria Nikolaevna Polosof in "Spring Floods," who enticed poor Ssanin's heart away from his betrothed, the lovely Gemma. She was by no means a perfect

beauty, but there was a powerful witchery of blooming womanhood about her. The desire to stand and gaze at her was irresistible; she always left behind her "a momentary impression of a lovely neck, perfectly shaped shoulders and a wonderful form." There is a fatal charm in her presence, a strange, tiger-like grace in her movements. And Ssanin, confident in the consciousness of his love for, and loyalty to, the one woman he has chosen to be his, idly pauses before "that purple-lined palace of sweet sin," and forgets truth, virtue and honor while under the influence of her spell.

An equally dangerous but far more attractive coquette is Irene in "Smoke." Madame Polosof the virtuous reader will unhesitatingly condemn, but Irene, although her actions are, morally considered, no less blameworthy, cannot fail to enlist a goodly share of sympathy. She has loved Litvinof in her youth and never fully conquered her passion for him. After a long separation, she meets him, by accident, in Baden-Baden. She is married to an empty-headed Russian nobleman, and he betrothed to a plain but pure and excellent young girl whom he is just about to wed. The result may be foreseen; Tourguéneff's heroes never have the strength to resist a sin, when clothed in the form of a beautiful woman. They wrestle ineffectually with their passion and succumb. It hardly redeems Litvinof's character that in the last moment his plan of elopement fails, and that after many years of repentance and vain regret, he finally returns to his Tatiana, and receives her forgiveness.

We might add a dozen more portraits to this long gallery of fair sinners; but it is not a healthful atmosphere to linger in, and we should be loath to give the reader the impression that our author regarded these as the true representatives of Russian womanhood, or that he had studied with peculiar fondness the psychology of sin. We have already intimated that there is no lack of noble and high-minded women in his books. We hardly know to whom to give the preference, but as the story of Assja as yet remains untranslated, we select her as an example. Assja is a wild and shy girl, the illegitimate daughter of a nobleman, and is traveling with her brother Gagin in Germany, where the author meets her. She runs about, climbs rocks with the agility of a goat, sings and laughs in one moment, and in the next becomes grave and quiet. The purpose of the story, or rather its leading thought, is to show how this wild and unruly thing,

still in her early girlhood, is transformed by the power of love into a sweet and passionate woman. The process is traced with a most exquisite appreciation of fleeting shades of feeling, and still with that stern eye for minute realistic details in which lies the author's chief power.

The story-teller, who introduces himself speaking, discovers that Assja loves him; he has traveled far and wide, has seen a great deal of the world and is well-nigh convinced of its worthlessness. But although he is not sure that he returns the girl's devotion, he is ever conscious of the fascination of her presence, and with a half timid reluctance he watches her fair form and listens to her fresh young voice, until finally at a secret interview, his pity for her leads him to make a caressing gesture which by her is interpreted as a confession of love. The scene is painful, but it is described with a dramatic intensity and strength which place it on a level with the best productions of Balzac and George Sand. All of a sudden the ungenerous hero awakens to a sense of the responsibility he assumes by accepting the love of this strange untutored creature who knows nothing of the requirements of the aristocratic society to which he belongs; vague scruples beset him, and while he is cruelly upbraiding Assja as well as himself, the frightened and humiliated girl hastens away. But no sooner is she gone than he begins to discover her real worth, and how dear she is to him. Longing to repair the wrong he has done her, he sets out in quest of her, vainly pursuing her course from city to city. In this mournful strain the story ends; Assja is nowhere to be found.

Tourguéneff's philosophy of life, so far as we can learn from his novels, is akin to that of Heine and Schopenhauer. He is a sincere and outspoken pessimist; but his pessimism is not like Heine's, saturated with acid; although naturally gloomy it is essentially pure, warm, and even genial. It partakes of the pervading sphere of his own character; and he is a sad, but at the same time a warm-hearted and genial man. He does not, like Schopenhauer, assume a hostile attitude toward humanity; on the contrary, he loves his fellow-men, suffers with them, and pities himself and them. He is himself deeply involved in the problems which perplex the rest of his kind; he states these problems clearly, but he does not pretend to know their solution. The same idea of an inexorable fate, which is so prominent in the writings of George Eliot, is

also the refrain of all Tourguéneff's works. Man, limited on every side by a chain of stern, immovable forces, struggles helplessly like a fly caught in a spider's web, and the end is invariably defeat. From the author's philosophic stand-point, human life, no doubt, appears as lugubrious as he pictures it, but his view is at least a one-sided one, and it is but partly true. The comfort which the Christian religion holds out to our sorely harassed race he evidently does not accept, and most of his heroes seem as regardless of its existence as he. But for all that, we find nowhere in his works those impassioned tirades against the Gospel of Christ which so disfigure even the purely aesthetic writings of Heine. Tourguéneff is too perfect an artist to be beguiled into partisanship. Christianity is to him a great and marvelous phenomenon, the influence of which, as an element in the formation of character, he is by no means disposed to underrate. In its pure atmosphere, Liza, one of the noblest creations of modern fiction, lives and breathes and has her being, and her child-like faith strengthens and inspires her to deeds of heroic devotion and self-sacrifice. In Arina Vlassievna, the mother of Bazarof in "Fathers and Sons," religion assumes the more primitive guise of mysterious superstition, and in "A Strange Story," its aspect is pathological rather than psychological; it becomes a mania, and confronts

us in the most grotesque form of fanaticism. The instances we have here cited do not, however, contradict our assertion that Tourguéneff's relation to Christianity is merely that of a profound outside observer. He would have described with the same artistic pleasure the mental states of a dancing dervish or a scene of bacchanalian frenzy.

This apparently neutral ground which Tourguéneff occupies (which is as far removed from indifference as it is from partisanship), or rather the strict impartiality with which he views the great religious and social movements of the day, may lessen his influence for good during his own lifetime. Had he been an impassioned declaimer, he might perhaps have made himself the leader of some political faction whose power, while Russia is ruled by an autocrat, must necessarily have been very limited. But every faction, however great and noble its aims, is the expression and embodiment of a passing need of society, and has no *raison d'être* when the abuses against which it has fought are at length abolished. Tourguéneff, by his independence of party limitations, by his profound knowledge of humanity, and by his serene delight in realistic truth for its own sake, has gained for his writings the twofold dignity of æsthetic and historical classics, and for himself a place in the society of the Immortals.

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### STORM MUSIC.

LIST! through dusk silence warningly there steal  
 The first, low notes of airy violins.  
 With one shrill chord the symphony begins,  
 While oft the thunder's diapason peal  
 Rolls through the flame-lit sky—God's chariot wheel.  
 And hark! what trumpets blow from yon black cloud,  
 While the strong trees in sudden terror bowed  
 Seem from the tempest fleeing; then reveal  
 The horror of their anguish by deep moans  
 And wailings keen, far tossing to and fro  
 Their tangled branches, where the angry wind  
 Wrecks all his mighty passion unconfined—  
 Then leaves them shattered, like brave men laid low,  
 By war's hot breath, to die mid battle groans.

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## NICHOLAS MINTURN.

BY J. G. HOLLAND.



NICHOLAS GIVES THE DEAD-BEATS A LESSON FROM THE LAOCOON.

## CHAPTER XVI.

WHEN Nicholas left "The Crown and Crust," on the evening of his encounter with the three rogues, he had only the shadow of an idea of what he was going to do with them, on the fulfillment of their promise to call upon him the following morning. Of one thing he was sure: he cherished no resentments against them; he desired to do them good. How to accomplish his purpose was the question which the reflections and inventions of the night were, in some imperfect or tentative way, to answer. He had the men at an advantage, which he did not intend, in any way, to relinquish. He saw that they were to be treated with a firm hand. He supposed that they would endeavor to overreach him, and he had never felt himself so stimulated and excited as during the night which preceded their appointed visit. Indeed, he slept but little; but before morn-

ing he had reasoned the matter out to his own satisfaction, and evolved a scheme, in the success of which he felt a measurable degree of confidence.

He informed Pont, at an early hour, of the visit he expected, and told him that he should be at home to no one until these men had come and gone.

At precisely ten o'clock, according to the agreement, the men presented themselves together. There was a guilty, sheepish look upon their faces, most unlike that which they wore upon the previous day. Then they were all in earnest, in their propagation of lies for the securing of a gift. This morning they had no story to tell, no part to play—at least none that had been determined upon and rehearsed. They had been detected as rogues; they were under the menace of prosecution as such; and Nicholas had surprised them so much by his boldness and promptness in getting back his

money that, to use his own familiar phrase, they "didn't know what he was going to do." As Nicholas heard them ascending the stairs to his room, he went to his door and opened it, before Pont had had the opportunity to knock.

They entered in the same order as on the previous day. First, Mr. Jonas Cavendish received a cordial greeting, and then Mr. Yankton, and then Mr. Lansing Minturn. Pont was indulging in a broad grin, and evidently desired to make an excuse for lingering in the room. He advanced to the fire to give it a little attention, but a motion of his master sent him out, and Nicholas was left alone with his "raw material."

"Draw up to the fire, gentlemen, and make yourselves thoroughly comfortable," said Nicholas. "It is very kind of you all to be here so punctually."

"Oh! don't mention it," responded Mr. Cavendish. "We are only too glad to be in such pleasant quarters."

"Shall I call you all by the names you gave me yesterday?" inquired Nicholas.

"You may as well do so," replied Mr. Cavendish, who assumed the leadership, by virtue of his superior art and education.

"Very well, gentlemen; are you interested in art? I have some excellent engravings in this volume. Suppose you look it over between you."

Mr. Yankton sat in the middle, and took the volume in his lap.

It was a volume of engravings, representing the classical ruins and art-treasures of Rome. Nicholas sat near them, and for more than half an hour, as the leaves were slowly turned, explained the pictures to them as well as he could. Not unfrequently, Mr. Cavendish came to his aid, or offered suggestions which betrayed his early culture, astonishing Nicholas and his companions as well, and acquiring in the process a degree of self-respect, or personal pride, which wrought a curious transformation in him.

"I have some pictures on the walls," said Nicholas, "that you may be interested in;" and he rose from his chair and led the way to a sunny landscape, where a number of children were playing under a tree. Beyond the tree a placid river threaded a broad meadow, and beyond the meadow rose green hills, and beyond the hills, defining the sky-line, a mountain swelled, wrapped in its morning atmosphere. The picture was full of the morning—the morning light, the morning of the year, the morning of life. The dew was on the grass, a

wreath of mist shone white on the mountain-side, and freshness was everywhere, as if there had been a shower on the previous day, and nature and life were celebrating the event with new blood in their veins. The men looked at it a long time. What thoughts were in their hearts, Nicholas did not know. He only knew that the picture was its own interpreter, and that no weary man, in whom the slightest degree of sensibility remained, could look upon it without sympathetic or pathetic pleasure.

The men lingered as if spell-bound. Not a word was said. The beautiful room was so still that the little clock upon the mantel-tree could be heard telling the tale of the passing time.

Then they passed on, and the next object to which Nicholas called their attention was a small group of the Laocoön, in plaster. The men paused before it. The transition was abrupt, and it told upon them. There were the three helpless victims, writhing in the coils of the relentless serpents, and there stood the three men. They were quick-witted, and appreciated at once the lesson they had received. They knew and felt that the vices and the circumstances which enchain them were typified before them. They could not resent the rebuke or the lesson, because they were treated by a gentleman like gentlemen; and they could not know whether there had been design in it. They looked uneasily in one another's faces, and then back upon the group, in a strange and painful fascination.

"How do you like that?" inquired Nicholas.

"Well, it doesn't strike me as being very lively," said Mr. Cavendish.

"It strikes me as devilish unpleasant," said Mr. Yankton.

"Rather suggestive, eh?" said Mr. Lansing Minturn.

"It doesn't look as if those fellows were going to get out of it, very easily or very soon," Nicholas remarked.

"No, sir," said Cavendish; "the devil is too much for any man, or any three men, when he once gets a good hold and gets the advantage."

In an instant, Nicholas advanced to the bracket upon which the group rested, raised his hand and hurled the Laocoön to the floor. It came down with a tremendous crash, and lay scattered over the carpet in a thousand fragments. The men were thoroughly startled and surprised. Pont came rushing up stairs, and, without waiting to

knock, entered the room, under the impression that his master was suffering violence.

"Pont," said Nicholas quietly, "bring a basket and a broom, and carry off those pieces."

Pont's eyes were very wide open, and he hesitated.

"Be quick about it, Pont."

The negro saw that there was to be no explanation, and went off mystified, to the accomplishment of his task.

"Let's sit down again," said Nicholas, "until we get rid of this rubbish."

When Pont had carefully performed his task and left the room, Nicholas said:

"I'm glad that thing is out of the way. It has always been a pain to me, and I really do not know why I have tolerated it so long. It embodies a lie to every ordinary imagination. There is no evil bond so strong that a man cannot break it. All it needs is a resolute hand. You can never put the serpent together again that I have just crushed."

"Or the men," said Mr. Cavendish.

"I don't wish to. Their contortions would have no meaning without the monster which they resist. There, let me place my beautiful Apollo on that bracket—free, beautiful, divine! What do you think of that?"

There was no more desire that morning to study the fine arts. The men found themselves under a strange influence. They had, first and last, entered a great many rooms of luxury and refinement on their swindling errands, but their minds had been in no mood for receiving good impressions. They had, this morning, been in this room so long, they had been in a mental attitude to receive and had received so many new impressions, that they had almost forgotten who and what they were. They had had the leading parts in a great many low and vicious comedies. Here they had been spectators in a drama of a different sort. They had been led by a beautiful path up to a realization of their own bondage and degradation, and, before their eyes, there had been typified the overthrow of their enthralling vices and their own resurrection from them.

"Fellows," said Nicholas, "tell me about yourselves. I'm sure you never came to this without going through great temptations and great struggles."

"There isn't much to tell. People call us 'dead-beats,'" said Mr. Cavendish, who always spoke for himself and his friends,

"and that's just what we are. We have had our trial with the world, and we have all been dead beaten. The road into our life is straight and easy. There isn't one of us who didn't begin to lie when he came into pecuniary trouble. Just as soon as a man begins to lie to excuse himself for not paying a debt, or stretches the truth a little in order to borrow money, he's on the direct road to our kind of life. He goes on lying more and more, as his troubles increase, and, before he knows it, lying becomes the business of his life. There are plenty of men in New York now, who are shinning around from day to day to keep their heads above water, and who will be among us, and as low as we are, in two years."

"Doesn't it trouble your conscience?" inquired Nicholas.

"Not a bit," responded Mr. Cavendish; and the others laughed in approval.

"And do you never have a desire to get out of this kind of life?"

"Well, no. It's rather exciting. We were having a pretty good time last night, when you broke in on us."

"And you were not ashamed when I showed myself to you?"

"I can't exactly say that," said Cavendish.

"Come, now, tell me honestly: would you not be glad to enter again upon honest and respectable life if I will help you to a chance?"

"What does it matter to you, now? What do you care about us?" inquired Cavendish.

Nicholas was getting toward the practical results of his experiment, and his eyes filled with tears as he answered:

"Life seems so beautiful a thing to me that I cannot bear to see a man throw it away. Manhood is something so noble and grand that its ruin seems to me to be the most terrible thing in the world. Here you are—three ruined men—preying upon society like three wolves—your manhood gone, your mothers and sisters forgotten, your wives and children, if you ever had any, either killed by your disgrace, or living in despair, your tongues trained to daily lying, your past a failure, your future hopeless, and yet, when I offer to help you out of it, you ask me what it matters to me? If I did not care about it, I should be a brute. If I did not care about it, I should feel that I ought to get down upon my knees, even to you, and ask your pardon. God only knows how much I care about it."

Nicholas said this with the most earnest feeling, looking into the faces of the men who sat before him, silent, spiritless and unresponsive.

"It's too late," said Cavendish.

"It's not too late. It shall not be too late. You will accept the proposition I make to you, or you will be in the lock-up before night. If you will not reform, it will be my duty to protect society from you. I do not like the alternative any better than you do. To me, you are all men now—gentlemen, if you please. For this morning, you have laid aside your unworthy characters, and we are here together to see what we can do for ourselves. I know I can help you, and I know you can help me, if you will. There is no man—there are no three men—in the world, who can do for me a favor so great as you have it in your power to do for me this morning. Why, if I never did anything else in all my life, it would make me glad and rich to be able to help you back to life and self-respect."

Nicholas saw that the man who had assumed the relation of distant cousin was moved. Even the rheumatic man was profoundly sober, but both were under the restraint of the superior brain which the missionary possessed. The latter had the dignity, in his own domain, of being a leader, and Nicholas was inviting him to a life of subordination. It was painful to see how weakly the wills of all of them worked toward a determination upon anything that was good.

"Besides," Nicholas went on, after observing them a moment, "I want you to help me. You know so much more than I do about this city life and its temptations and miseries that I want you to help me—to be my counselors, my assistants."

The thought that they could be of use to anybody—that they could be accounted of importance in any scheme of good—that instead of being beneficiaries they could become benefactors—was a new and fruitful one. Mr. Cavendish was quick to see the drift of impression in the minds of his companions, and was conscious of certain ambitions that were awakening within himself. Light began to dawn in the horizon of them all, but still the enthusiastic missionary to the Flat Heads was inclined to question and delay.

"I suppose," said Cavendish, "that you expect to make praying sneaks of us all,—that we are to be pawed over, and palavered with, and preached to."

"I don't know that I am acquainted with any praying sneaks, as you call them," said Nicholas; "but if there is any sneak that is meaner or worse than one who sneaks into a benevolent man's house with a lie in his throat with which to steal his money, I should like to see him. He must be a curiosity."

"Good!" said Mr. Lansing Minturn, laughing suddenly; and he and Mr. Yankton clapped their hands.

Mr. Cavendish felt that his scepter was departing, but he could not give it up yet.

"But that's what they do," he said. "They all want us to become pious, you know. They want us to embrace religion, if anybody knows what that is."

"I am sorry to say," said Nicholas, "that religion is not for such fellows as you are. I think that many well-meaning persons make a great mistake in this matter. I should just as soon think of presenting religion to a pig as to a confirmed dead-beat, or willing pauper. A person who has not will and shame enough to take the single step that places him back within his manhood, will never take the two steps that will lift him into Christianity. I am not a preacher, but, if I were, I should never think of preaching to you, until you had become something different from what you are now. Christianity was made for men, and not for those who have ceased to be men. There is not a Christian motive that can touch one who has sunk below his own respect. I was once in very deep water myself, and I was obliged to come up, and work to get up and stay up, before the rescuers could reach me and save me."

The men looked in each other's faces.

"What do you say, boys?" inquired Mr. Cavendish.

"I'm going to try it," said Mr. Lansing Minturn, "whether the rest do or not."

"I, too," said Mr. Yankton.

"Very well, I'm with you," said Cavendish.

Nicholas was overjoyed. He seized the hand of the first speaker, and said impressively:

"You are quite welcome to the name of my father and of my mother. Keep them both. They will help to shut you off from your old associations, and hold you to your new."

Then he shook the other men by the hand, and told them that they had given him one of the happiest moments of his life.

"Now, what do you propose to do with us?" said Cavendish, who refused to relinquish his lead.

"Don't put it in that way," responded Nicholas. "What do we propose to do with ourselves, for you must remember that we are all engaged in one enterprise. I am to help you, and you are to help me. I propose lunch."

"I presume we are all agreeable," said Cavendish, laughing.

Nicholas touched a bell, to which Pont promptly responded.

"Bring up lunch for four," said Nicholas, as the negro appeared.

Then they broke bread together, and their viands were served with courteous punctilio. The men were awkward at first, but their embarrassment soon passed away, and they entered into a lively conversation, which made the meal thoroughly enjoyable.

"Now," said Nicholas, as he rose to his feet, "you are strong enough to promise me a few things which will be necessary to your success. In the first place, you must promise me never to return to your old haunts, never to drink a glass of liquor unless it is prescribed for you by a physician, always to stick together and be society for one another, and always to come to me if you are in trouble."

"That's pretty tough," said Cavendish.

"Do you falter?"

"A man doesn't like to lose his liberty, you know."

"Liberty to lose your place!" exclaimed Nicholas. "Liberty to go into dirty society when you can have good! What can you mean?"

The other men did not demur, and Nicholas knew that he had not yet touched the right spring in Cavendish, but he determined to study him thoroughly, and to find it at any cost.

"Well," said Cavendish, with a sigh, "let's come back to the question: What do you propose to do with us?"

"I propose to set you to work for wages, and to keep you at it every day. I propose to get you a comfortable boarding-house, where you can all live together. I propose to interest you, if I can, in an enterprise in which I have great faith—the best enterprise, I am sure, which it is possible for a man like me to undertake. I am going to try to get hold of a great many such fellows as you are, and as you know all about them, you can be of much assistance to me. You, Cavendish, must be my right-hand

man, unless it should happen that I am compelled to become yours."

Nicholas had found the spring without looking far. A prospect of leadership and influence lighted the eye of the ex-missionary to the Flat Heads.

"Now," said Nicholas, putting on his overcoat and hat, "let's go and find a boarding-place. I have a dozen advertisements in my pocket, clipped out of the papers while I was waiting for you this morning."

As they passed out of the hall and struck the sidewalk, Mr. Cavendish coupled himself with Nicholas, and the men walked down the street together. Nicholas was conscious that he was but little known, and that few, if any, would notice his strange companionship. Besides, he was deeply interested, and he did not care.

They went to one house after another, and finally decided upon a large, double-bedded room, in a cheap part of the city. Nicholas, after the decision was made, had a long conference with the landlady, which ended in his becoming personally responsible for the board of the three men for a month, and an agreement, on her part, that she would report to him any irregularities of her new boarders, should any occur.

During this interview he had left the three men in their room. On returning, he found them very comfortable, and cheerfully chaffing each other.

"You two fellows," said Nicholas, speaking to Lansing Minturn and Yankton, "are to stay here, while Cavendish and I go out. You have had enough to eat, you are comfortable, you have no temptation to go away. We are going out to see what we can do for you."

Nicholas and Cavendish had hardly reached the corner of the street, when the two men, thus left free from care and in pleasant quarters, lay down upon their beds and went soundly to sleep. They had been up more than half of the previous night, and the beds were the most inviting they had seen for years. No lock and key was needed for them.

Nicholas and his companion made directly for Glezen's office. They found him, as he told them, "up to his eyes" in work, though he gave Nicholas a cordial greeting, and received his companion politely. Glezen knew, with the quick insight that comes to an observant man in city life, that Cavendish "had had a history." He knew that he was not an ordinary man, in ordinary



circumstances. His seedy clothes, his sharpened countenance, his quick eyes, betrayed the adventurer who lived upon his wits. "Glezen," said Nicholas, "I have brought this man here, looking for employment, because I have become very much interested in him."

"Do you know him?"

"Yes—the worst of him."

"Well," said Glezen, "I want a clerk. My work is getting too heavy for me, but I must have a capable and a faithful one. How long have you known him?"

"Since yesterday morning."

Glezen looked into the face of the applicant with an amused smile, which Cavendish not only understood but responded to for reasons which even Glezen did not apprehend.

Mr. Cavendish cleared his throat, and then, with some hesitation, turned to Nicholas, and said: "You have no idea of deceiving your friend. You will tell him all about me, some time, and if anybody is going to do it, I had better do it myself. Mr. Minturn—turning to Glezen—" has been kind enough to bring me here, after I have abused his confidence, with the hope of giving me the chance for an honorable life, which I had supposed was forever gone. I am what they call a dead-beat. I don't know that I am very much ashamed of it. The world has used me roughly, and I have had a hard time, but I am willing to try again. This gentleman is the first who has given me a good word, or exercised a good intention toward me, for years. I am not very hopeful of myself, but I am willing to try to please him. In fact, I have promised to do so. And now if you will give me employment, you will find that I am capable. So long as I stay, I shall serve you faithfully. You may come here some morning and find that I am gone, but you'll miss nothing but me. That's all, and I couldn't speak to you a more honest word if I were dying, so help me God!"

"I like that pretty well," said Glezen. "I believe you'll do what you say, too."

"Thank you," said Cavendish, "and you'll excuse me if I say that I think we shall get along very well together."

"Thank you," responded Glezen, "and now let's see what you can do with a pen."

Cavendish drew up to a table, wrote a polite note to Glezen, and signed it.

Glezen gave it a glance, and said:

"That will do. Now what wages do you want?"

"I think," said Nicholas, "that you had better leave that matter to Mr. Glezen. He will deal fairly by you, I know."

"All right!" said Cavendish.

Glezen comprehended the object that Nicholas had in view, and said promptly:

"Your salary begins from this morning; and here is a document that I wish you to copy before you sleep. I shall be obliged to sit up all night to do it if you do not."

Cavendish took it in his hand, but seemed troubled, doubtful and hesitating.

"What is it?" said Nicholas.

"I'm afraid the boys will get tired of their confinement, and leave," Cavendish replied.

Nicholas was delighted to find him assuming a sense of responsibility for them, and said:

"Mr. Glezen will permit you to take your work home, at tea-time, I am sure, though I'm not afraid of their leaving their comfortable quarters for the present. They have no money."

"I know," said Cavendish, "but we must keep them contented and interested."

Glezen readily gave his consent to the proposition of Nicholas, and then Cavendish sat down at the desk prepared for him, to begin his work.

"By the way," said Nicholas, rising, and addressing Cavendish, "do you know whether that newly manufactured cousin of mine was ever a civil engineer, as he pretends to have been?"

"Yes, that was once his profession, and he will do well in a subordinate position."

"What about Yankton?"

"Well, I don't think he was ever trained to anything. The rheumatic dodge isn't high art, you know. Don't send him out-of-doors."

"Very well," said Nicholas; "you will work here until six, and I'll call and go home with you. I mean to get some good news for them before we see them again."

Then our enterprising young philanthropist shook hands with Glezen and his clerk, and went out. He could think of no one so likely to second his plans as Mr. Coates. He remembered what the old man had said at his dinner table, but that did not discourage him. He had learned that talk did not mean much, on either side of the question, and that those who seemed the hardest and the most prejudiced were quite as likely to be helpful as those who were more weakly and tenderly sympathetic.

So he went directly to the prosperous mercantile establishment of Mr. Coates. If

he had appreciated the fact that the old man could not have denied anything to the rescuer of his wife and daughter, he would have hesitated, but the thought that he had ever rendered Mr. Coates or his family a favor had not entered his mind. He was going to ask for grace and not for reward.

Nicholas entered the private office of Mr. Coates with a good deal of timidity, but he was heartily received and put at his ease.

Any one who held an interview with the old and eccentric merchant was obliged to do the most of the talking. His nature seemed to be extractive and absorbent. To simple-hearted Nicholas, these qualities were irresistible, and, with a few suggestions and questions, here and there, Mr. Coates managed to draw out from the young man the whole story of his experiences and experiments with the rogues he had taken upon his hands. The old man carried a sober face through it all, but suffered from certain inward convulsions which, on rising to his throat, in the direction of laughter, were suddenly shunted off into a cough.

He had heard many praises of Nicholas from his wife and daughter, as well as from Glezen, with whom he had become well acquainted; but this was the first time he had ever enjoyed the privilege of a good look into him. He was pleased with him, and more than ready to serve him.

"D-did you ever sk-in an eel?" said he. "Never."

"Sl-ippery," said Mr. Coates.

"You think these are slippery fellows, I suppose."

"H-handle 'em with m-mittens. D-don't make too m-much of 'em."

"My mittens are the police," said Nicholas. "They have seen the rough side of my hand, and felt it, too. All that I want to have you understand is that my whole heart is in the enterprise of saving these men. I believe it can be done. I have the advantage of them, and I propose to keep it. If one of these men dares to cross the line back into his old life and associations, I shall put him where he will have an opportunity to repent at leisure."

"You w-want to have me t-take Y——"

"Yankton, yes."

"I d-don't see how I c-can."

"I'm very sorry. Have you nothing for him to do?"

"Y-yes, I could m-make a light p-porter of him, but I c-couldn't speak his n-name once a f-fortnight."

Nicholas laughed heartily, and responded:

"Then we must get a new name."

"C-call it T-Twitchell," said Mr. Coates. "He'll r-recognize the t-translation."

"So you'll take Twitchell, will you?"

"Y-yes, I g-guess so. I suppose a r-rose by any other n-name would s-mell a g-good deal sweeter."

"Oh, I'll see that he is cleanly dressed," said Nicholas.

"W-what are you g-going to d-do with the other one?"

"I don't know."

Mr. Coates, who sat in a revolving chair, wheeled around to his desk, and wrote in silence a long note, which he carefully folded and addressed. Then he turned and handing it to Nicholas, said:

"T-try that."

It was addressed to the Commissioner of Public Works, and contained a statement of all the facts relating to the history and position of the man for whom Nicholas was seeking employment. It contained also the request, as a personal favor to the writer, that the Commissioner would do what he could, consistently with the interests of the public service, to further the bearer's enterprise.

Armed with this document, his heart glad and expectant, and his face glowing with enthusiasm, Nicholas bade the old merchant a good afternoon, and sought the office to which the note was addressed.

He found the Commissioner very busy, with a number of impatient men in the ante-room of his office, waiting for an interview. It was more than an hour before his opportunity came. He presented his letter, which the Commissioner read with a frown. Then he sent for half a dozen men in different parts of the building, and held a consultation with them. The matter looked very dubious to Nicholas, and he began to tremble for the fate of Mr. Lansing Minturn.

However, after the young man had been sufficiently impressed with the importance of the matter which he had presented, and the profoundness of the difficulty which had been mastered in arriving at a decision, he was called to the side of the Commissioner, and, in the most friendly and confidential way, informed that it was winter, that not much was doing, that the department was overwhelmed with applications for employment, that there were those among his friends who, if they should know that he had favored Mr. Coates before them, would make it hot for him, that the appropriation was running very low, that Mr. Lansing Minturn's pre-

cedents were not such as would reflect credit either upon his family—begging the pardon of the family as it was represented by the gentleman before him—or upon the department, that he really had no right in his public capacity to respect personal considerations, etc., etc., etc.

After he had squeezed all the hope out of Nicholas that was possible, and shown him the preposterousness of Mr. Coates's request, and placed the young man in the position of a humble suitor for a benefaction of untold value, he condescended to say that it had been decided that, as a favor to an old and highly respected citizen, whose political influence had always been upon the side of economy and public order, Mr. Lansing Minturn should have a chance.

"Oh, I thank you! I thank you!" said Nicholas, pressing his hand, with a warm stream of feeling spouting up from his heart like a geyser, and overflowing the rocky Commissioner at his side.

"You appreciate the difficulties of my position," said the Commissioner.

"Entirely, and it is only too kind of you. I can never forget this courtesy."

"I can't ask that," said the Commissioner, smiling in a patronizing way. "Remember it until after election. That's all I ask."

Nicholas saw the point distinctly, and saw furthermore that he had been a little boyish and gushing.

"Send your man here in the morning, with a letter," said the Commissioner. "Good evening, sir!"

The mind of Nicholas was too full of his victories to make any analysis of the operation through which he had just passed. During the long stay in the Commissioner's office, the short winter day had come to an end, and he found, on issuing upon the street, that the lamps were lighted. He returned to Glezen's office, where he found both the lawyer and his new clerk busily engaged at their work.

"Hurrah!" exclaimed Nicholas, "I've got work for them all. Did anybody ever hear of such luck?"

Then he told them briefly what he had done, and how he had been able to accomplish his purpose.

"Nicholas," said Glezen, solemnly, "do you know that you are ripening for a memoir? Don't die. I've always been afraid of being too good for this world, and have tried to keep just wicked enough to live."

Cavendish, driving away at his pen, with

a smile illuminating his pointed face, responded:

"So have I."

A laugh followed, and then Nicholas told his protégé that he would accompany him to his boarding-place. Papers, pens and ink were taken from the office, and the two, with a strange, light feeling in their hearts, threaded the streets together, and arrived at their destination just as the two men whom they had left there were yawning themselves into consciousness.

Nicholas sat down with them, and told them the results of his afternoon's labor on their behalf. When he reached the matter of Yankton's change of name, and the reasons which had determined it, the merriment of the party became uproarious. The whole affair was as good as a play. While they sat, the tea-bell rang, and Nicholas rose to take his leave.

"Cavendish will be obliged to work this evening, and will be fully employed," he said, addressing the other two men. "He will need to get rid of you, and I want you to come to my rooms to obtain the letters you will need to-morrow; and, perhaps, I can do something to make you more comfortable and more presentable."

The men promised to call, and then Nicholas went out, took a passing omnibus, and rode home. Dispatching his dinner, he wrote the letters he had alluded to, and was ready to devote himself to his visitors when they arrived. The sheepish look of the morning had passed from their faces, and, relieved of the presence of Cavendish, they talked freely of their histories, and spoke courageously and hopefully of the future. Nicholas passed an interesting and delightful evening with them, and before they took their leave brought out to them some of his half worn clothing, which he begged them to accept.

"I don't give you any money," he said, "because you don't need any, and it would be a temptation to you. I'll call to see you to-morrow night."

They took leave of their benefactor and helper with hearty expressions of gratitude, and pledges of good behavior in the situations which had been procured for them; and then Nicholas sat down and thought it all over. He had accomplished the largest day's work of his life. He had labored under the influence of the best motives all day, and had worked in earnest. He was weary in body and mind, but he had never been more thoroughly happy. What the

final result of his efforts might be, he could not foresee, but he felt that if he could save these three men he should not live in vain. He had only begun, however, and the prospect of future harvests filled him with enthusiasm. He knew that for a long time these men must be kept under surveillance. He knew that Glezen and Mr. Coates would do what they could to help him, and that they would be trustworthy counselors; but he saw that all three men must be kept busy—that their evenings would have to be looked after. It was for this necessity that he must wisely provide, and nothing seemed so promising to him as in some way to make them responsible for each other, and to change their attitude from that of beneficiaries to benefactors. If he could interest them in his schemes, and make them helpers in the task of reclaiming others, he was sure that he could hold them to their present resolutions.

If the rich young men of the city who had tried in vain to tempt Nicholas into their life of meaninglessness and idleness had looked into his heart that night, they would have seen how small occasion they had to regard him either with pity or contempt.

#### CHAPTER XVII.

WHILE all these events were in progress, others of hardly less interest to the reader occurred in Miss Larkin's little parlor.

Few are they who, in the activities of robust life, pause to think of the loneliness of the helpless invalid—of the isolated bondage of weakness. To a young woman who is cut off from all youthful amusements and pursuits, who is restrained from love, who, within four walls, is bound to her couch by chains as cruel as if they were made of steel, whose hands are forbidden any response to the busy motions of her mind, there come hours when even sympathy wearies of its ministry, and mercenary attendance must seek relief from its burdens. She must be left alone, her hands folded in patient waiting. Reminiscence, idle dreaming, aspiration, regrets, tears—these come in pathetic routine to fill the heavy hours when society departs. Great, silent heroisms are wrought out in intervals like these, more wonderful than the common imagination can conceive; or great moral disasters are suffered, from which there is no recovery.

In one direction or the other—toward cheerful, self-forgotten, ever-buoyant fortitude; or toward fretfulness, impatience, dis-

content and weak complaining—the invalid always gravitates. Wine, long shut from the sunlight, ripens into nectar or vinegar. The alternative is mainly fixed by the amount of sunlight it had the privilege of absorbing when it hung in clusters upon the vine.

Grace Larkin had had a delightful girlhood. Before she had been set aside by the hand of disease, and previous to the bereavements which had placed her in Mr. Benson's keeping, she had absorbed all the sunshine that could come into life through health, a happy temperament, parental love and prosperity. So invalidism had ripened her into a womanhood that was marvelously strong and sweet. Like all invalids, she had her lonely hours,—hours that seemed like eternities while passing,—but no friend ever found her in tears, or left her without the experience of a pleasant inspiration. All who came to give the comfort of sympathetic companionship, departed with the consciousness that they had received more than they had bestowed. This was the secret of her hold upon her friends. This was what made her tasteful little parlor a delightful resort.

The change in her condition, to which her guardian once alluded in his conversation with Nicholas, was one concerning which she had held no communication with him. He had either guessed the truth, or utilized a vagrant impression in the accomplishment of his purpose to ascertain the young man's sentiments.

It was true, however, that she felt more hope concerning her ultimate recovery, during the months that followed the disaster which interrupted her attempt to travel, than she had ever dared to indulge in before. The reaction which followed the terrible shock had raised her. She felt that she was stronger—that the nerves and muscles which had so long refused to perform their offices had received new life.

Thenceforward her lonely hours were far from being the least interesting that she passed. She said nothing of her altered feelings and her awakening hopes, even to Miss Bruce, her companion; but that lady was more and more at liberty to be absent; and she often found her charge, whom she had left reclining, sitting upright upon her lounge when she returned, and looking flushed, though not unhappy. What experiments had been in progress during her absence, she did not know, but she guessed.

Miss Larkin could not have been a woman—least of all the woman that she was—if she had failed to recognize the pas-

sion which Nicholas felt for her. From the first moment that she suspected it, she had been upon her guard. She did not dare to indulge herself in thoughts of him. She knew that her conscience would never permit her to burden his life with the care of her invalidism. For any selfish satisfaction or delight, she would not load him with the reproaches or the pity of his friends. If she could not be a wife to him, in all wifely ministries of care and helpfulness, she would live alone and die alone, even if she should ever permit herself, or be compelled, to love him.

Nicholas did not need to be told this, for he had already divined it. Indeed, it was this consideration which more than once had restrained him from laying his heart and life at her feet, and offering her his hand. He knew that she would reject him if he should ever be tempted by the stress of his affection to discover his heart to her, and that the event would bring to her and to him an overwhelming pain.

She ordered her thinking as well as she could, but she could not entirely put him out of it. Much as she longed to mingle in the busy scenes of life which engaged her friends, earnestly as she desired recovery that she might be an actor in the beneficent schemes which they were pushing on every hand, Nicholas, and the possibility of life in his companionship, always mingled with her motives and her hopes. She believed in him wholly. Her heart gave him its supreme approval. So, however she might disguise the fact to herself, she desired to get well for him,—for many other things besides, but always for him.

One afternoon, when Miss Bruce returned from a hurried walk, she noticed that different objects about the room had been disturbed. A shawl had been dropped in the middle of the room. A rose had been picked from a pot in the window.

Miss Bruce paused and picked up the shawl. Seeing the rose at Miss Larkin's throat, she said:

"Has any one called?"

"No."

"Has Mrs. Benson been in?"

"No."

"No woman—no child—no angel?"

"I have but one angel, and she is asking me questions. I wish she were less inquisitive," answered Miss Larkin, with a merry laugh.

Miss Bruce regarded her a moment, then crossed the room, knelt at the couch, put

her arms around the beloved invalid's neck, and burst into tears.

"Oh, it is too good to believe—too good to believe!" she said.

"It isn't much, my dear," responded Miss Larkin, greatly moved. "I am very weak, and a long way from recovery yet. Don't speak of it. I don't wish to awaken hope in any one. I intended to hide my own hope from you, and you must not betray me."

"Oh! my child, my child! shall I ever see you well again—walking again?" said Miss Bruce, kissing her with ardent affection. "Heaven be praised for the hope; and Heaven only knows how often I have prayed for it."

Miss Larkin was very much affected by this demonstration on the part of one who was naturally calm and self-contained, and who had trained herself to silence.

"Are you going to let me see you do it?" inquired Miss Bruce, rising to her feet and wiping her eyes.

"I'm tired now. Let me rest awhile."

After the unwonted exertion, she slept for an hour. Then she woke, and finding Miss Bruce present, she drew a chair to her couch, and by its aid rose to her feet, and pushing it before her, followed it tottering into the middle of the room. Miss Bruce saw that she faltered during the last steps, and had time only to throw her arms around her, before she sank so nearly helpless that she was with great difficulty restored to her couch.

"You see, my dear, that you must not try this again alone," said Miss Bruce tenderly.

"I'm afraid I shall," responded Miss Larkin smiling, but panting and faint.

The attempt was a failure, but it was sufficient to fill Miss Bruce with hope and expectation. There was certainly a change. There had been an accession of new life and strength, and she was physician enough to know that use would divert to the inactive limbs the vital energy and the muscular power which had been so long withheld.

For days afterward, however, she would not permit her charge to repeat the experiment. Then, once a day, and always at her side, she presided at the trial. Progress, if any was made, was slow; but the patient met with no drawbacks. She found her strength at no time utterly failing, but was always able to get back to her couch unaided.

Of these experiments and the hopes that were based upon them, none knew but Miss



Larkin and her devoted companion. Mr. Benson occasionally looked in,—always with his hat and cane in his hand,—made a kind inquiry, and departed. From the time he had read his ward's note requesting another private interview, he had studiously avoided all reference to it, and all opportunities for the interview desired. It was his delight and his policy to come in when others were calling. He knew she would not betray him, and that he could play his part of affectionate guardian under such circumstances to the advantage of his reputation. He could enter the room, ready for the street and his busy outside life, take her hand, inquire tenderly for her health, apologize for his intrusion, give a hearty word to her friends, and gracefully retire. Grace understood the trick, and he knew that she understood it. Once or twice he had been nearly caught. He had found her friends retiring as he entered; and then he always excused himself upon the ground that he had some business with one of them. Then he found that it was never safe to call when only Miss Bruce was present, because she always took the opportunity to retire when he entered. He was quick to guess the truth, viz.: that the matter was understood between his ward and her companion, and that he was to be entrapped if possible. As he had reasons for avoiding such a catastrophe, he avoided it.

One evening, when he had sat longer than usual over his dinner and his evening paper, and Miss Bruce and Mrs. Benson were enjoying a quiet *tête-à-tête* in the corner of the dining-room, they heard steps and the moving of a chair above them. Mr. Benson raised his eyes and listened. Then he looked at Miss Bruce, and saw that she was pale and seemed uneasy.

"What is that noise?" inquired Mr. Benson.

Mrs. Benson answered that she did not know. She knew, however, that the servants of the house were at their dinner, and that no one had called. Mr. Benson knew this, too. Miss Bruce made no answer. She would have flown upstairs in a moment if she had dared to do so, but she was afraid of arousing the suspicions of the family. Finally, she rose quietly, and saying that it was time for her to rejoin Miss Larkin, prepared to leave the room. Before she reached the door, there came a heavy jar upon the floor above them, and a noise as of falling furniture. She sprang from the room and mounted the stairs in headlong haste.

Mrs. Benson suggested that it might be robbers, and that Mr. Benson had better follow and see what the trouble was.

He laid down his paper, and, in a leisurely way sought Miss Larkin's room. The door was open, and he found Miss Bruce engaged in the difficult attempt to help Miss Larkin back to her couch. Quietly entering, and motioning Miss Bruce to stand aside, he lifted his ward in his arms and laid her upon the lounge.

Miss Larkin was not hurt, and was laughing. The exceeding solemnity of Mr. Benson amused her.

"Shall I leave you," he said, "and have a talk about this indiscretion at our leisure?"

"Oh no, by no means," she replied.

"You must see that you have been indiscreet, my child," he said in a tone of tender concern.

"Nevertheless, I'm not sorry," she responded, "for it has brought you to me. Don't you see that I write you a note, and you will not come, and then my chair slips away and falls down with me, and that brings you?"

"Don't trifle, my dear. It is a serious matter."

"It is not half so serious to me as the fact that I can never see you," said Miss Larkin. Mr. Benson looked around, and learned that Miss Bruce had silently left the room. Then he impulsively rose to his feet.

"Don't go," said Miss Larkin. "Wait until Miss Bruce comes back. I want to talk with you."

"There was no help for it. He had run into the trap, and insuperable considerations had closed it upon him. How he was to manage to get out of it without being hurt, he did not know; but the first expedient was one toward which he was directed by the habits of his life.

"My dear Grace," he said, "I had supposed that you were reconciled to your lot,—that you had humbly made up your mind to the assignments of Providence. Afflictions do not rise from the ground. They descend from above. The discontent which you manifest—this quarrel which you seem disposed to enter upon with the Power which has prostrated you—disappoints me."

Miss Larkin looked with her large eyes into his, as if she were wondering how such a man could say such words, and yet, to all appearance, believe himself to be sincere.

"Disappoints you?" she said. "We are often disappointed in one another."

Mr. Benson colored. He did not dare to push his reprimand any further in that direction.

"How long have you been engaged in experiments like this?" he inquired.

"For several weeks."

"Without the advice of a physician?"

"Yes."

"Has Miss Bruce known of them?"

"Yes, she has assisted me in them."

"Then she is an imprudent woman, and quite unworthy of the charge I have committed to her. I think it time that you have a more discreet and conscientious person in her place."

"So long as I am more than satisfied with Miss Bruce, I do not see why I should part with her," Miss Larkin responded.

"My dear," said Mr. Benson, quickly, "I have a duty upon my hands, and I must discharge it. It is my duty to place with you one who will counsel and keep you safely. I should forever blame myself if disaster should come to you through my neglect."

Again the large eyes were turned upon him in wonder. He saw straight through them into the memory of his own cowardly surrender of her life. He could not bear the look, and turned away from it.

"I release you from all responsibility for me," she said.

"You release me? What do you mean?"

"Can you forget, Mr. Benson, that I have arrived at the age at which I become responsible for myself? This is what I have been wanting to tell you. Miss Bruce will stay with me, because I wish her to stay. I shall persist in my experiments toward getting back into my life, because I am responsible for them. I am not discontented. I have never complained, but I am hopeful. I expect to get well, and after all these years of care I feel as if you ought to be glad, and to load me with congratulations."

Mr. Benson was thinking. There was no smile upon his face. She could not read his thoughts, but she knew that she had brought him no sense of relief, and that there were no grateful responses in his heart.

At this moment the door-bell rang, followed by the sound of merry voices in the hall below.

"Your friends are coming, and I will go," he said.

"Oh, not yet!" she replied, hurriedly.

"There is one thing that I must say to you. I must know about my affairs. I want you

to tell me everything. It will employ my mind, and you know that you can do nothing legally in regard to them without my consent."

"Let us talk about this at leisure. Your friends will be here in a moment."

He turned to go out, and heard the words:

"I must insist on this, Mr. Benson. It must be done at once. I cannot live in this way."

Mr. Benson opened the door, and met the incoming visitors, whom he received with his accustomed courtesy. Then turning, he said: "Good-night, my child!" in his most affectionate tone, and sought his library.

He sat down and thought. Everything was working against him. Of course he had not been ignorant that Miss Larkin had arrived at her majority, but her affairs were not quite in a condition to be exposed to her. The shrinkage of the values in which her funds had been invested, the personal use of her income, to which he had been compelled, by the necessities of his own credit, the continued downward tendency of business and property, the bankruptcy that threatened him—all this was terrible, and he could see no way out of it. He had been once humbled into abjectness by her, in view of her power over his reputation. Again he had come under her power through the maladministration of a trust.

There was no way—there could be no way—for him but to make a full confession to his ward, on his knees, if need be, of his short-comings, and to crave her forbearance and her aid.

#### CHAPTER XVIII.

"THE Larkin Bazaar" was in session again. It was the habit of this little group, consisting of the young people with whom our story has made the reader familiar, and others with whose personalities the story does not need to be burdened, to relate their experiences and to discuss "ways and means." Their interest in these meetings surpassed that with which they regarded any of the other of the social assemblages of the winter.

Already hints of some of the fresh experiences of Nicholas had been gathered by different members of the company, and all were desirous to hear the complete story from his own lips. They listened with the profoundest interest, and with much laughter, to the recital of the incidents connected with his encounter with, and capture

of, the three rogues he had undertaken to reform. Quite unconsciously to himself, he revealed his own gifts and his own character in his narrative, as vividly as he did those of the rogues. Miss Larkin and Glezen exchanged significant glances, which meant: "He is even better and brighter than we thought him to be."

"Now, Mr. Minturn, what are you going to do with these men?" inquired Miss Larkin.

"That is the question you are to help me to answer," he replied.

"But you have your own idea?"

"Yes, I know what needs to be done. They must be kept busy, and kept interested and contented. They are, in some way, to be so helped back to their sense of manhood, and they are so to commit themselves to a new course of life that they will never fall again. How to effect these objects is the great question, and I really feel incompetent to answer it."

"The difficulty to be overcome in the attempt to reform a pauper of any sort, it seems to me," said Miss Larkin, "lies in the impossibility of placing him in dignified conditions. No matter what ambitions and resolutions you may be able to stir in a man whose conditions are mean and suggestive only of his animal wants, they fade out when he realizes the setting in which his life is placed. His wife and children are ragged, his tenement is filthy, his neighborhood is base, and everything around him is a draught upon his self-respect. How he is to get that which will keep him and his alive is the ever-present question. Every thought is concentrated upon his animal life. Every thought of his neighbor is engaged in the same way. In this respect they are all like babies. Everything that comes to their hands is carried at once to their mouths. They cannot see any significance in the Christianity which good people preach to them unless it will, in some way, feed them or give them money."

"Well, I have removed my men from their mean conditions," said Nicholas, "and I shall lend them books and pictures."

"I was not thinking so much about them, as about those who are in worse conditions," said Miss Larkin. "If we could only contrive, in some way, to dignify the facts of their every-day life and surroundings, to inspire ambitions and emulations among them, to enable them to see that even poverty has its poetical side, and that their pinched lives may be dignified by humble

spiritualities, we could do much for them. Until we can accomplish this, every good thing which we do for them will be debased. We must make men and women of them before they will answer to motives addressed to men and women. There is no use in addressing our religion to an open mouth; we must have the open mind and heart."

"You have taken a very large contract, my good friends," said Glezen, who had never entered very heartily into their schemes. "Wise heads have been trying to solve this problem for a great many years, and they have never solved it."

"Well," said Nicholas, "perhaps the solution of the problem is to be revealed unto babes. I believe in Christian benevolence, of the right sort, but I suspect that the benevolence of propagandism is not exactly the thing for our pauper population. There is one field, it seems to me, which Christian benevolence has never properly occupied. It has fed the mouth and clothed the back, and thus nursed the very greed which it ought to have destroyed. When it has done this, it has undertaken to give to the pauperism it has helped to develop, the Christian religion. I don't believe it can be made to grow on such a stock. I believe you might just as well preach religion to a stableful of ravenous horses. There is an intermediate ground that Christian benevolence generally has failed to occupy. There is, now and then, a missionary or a Christian preacher, who sees the right thing to be done; but most of them ignore the conditions of the life they attempt to benefit, and, after cramming and clothing the body, present their religion in the form of a sermon or a tract. I feel sure that if three-quarters of the money that has been expended on food and clothing, and Sunday-schools and preaching, had been devoted to the enterprise of placing the pauper population in better conditions,—to giving them better tenements, better furniture, instruction in the facts and possibilities of common life, entertaining books, suggestive pictures, and training in household arts,—the good results to religion itself would be ten-fold greater than they are."

"Where did you learn all this?" inquired Glezen, with genuine surprise.

"I never learned it; I see it," replied Nicholas. "I thank God that I never learned anything to cloud my instincts in this matter."

"Well, you seem to have succeeded very well with the three fellows whose salvation

you have undertaken, so far. The end is not yet, even with them, but I'm inclined to think you can manage them."

"I am going to make them help me in some way," said Nicholas. "The reformed drunkard knows what motives to address to a man who is still a slave to his vice, and I don't see why a reformed pauper cannot be as useful to the class from which he has risen."

"We must all be careful about one thing," said Miss Larkin; "we must be careful not to forget that the poor who need aid are not all voluntary paupers, and we must not forget the little children."

This remark brought out Miss Coates, whose whole heart was with the children, and who believed that the way to cure pauperism was to stop raising paupers.

"Now you touch the vital point," she said. "I have not much faith in the reformation of the confirmed paupers, but I have great faith in the training up of a generation of children that will wipe out pauperism."

"Do you suppose you can counteract on Sunday a week's teaching in pauperism?" inquired Nicholas. "Do you suppose that children who live in a room little better than a sty, and who hear nothing talked of but food and the easiest way to get it, and who are instructed to manage for the reception of benefactions from their teachers, can be cured of pauperism in a Sunday-school? Their whole life is in pauper homes and pauper conditions."

"They can be taught honesty and truthfulness and moral obligation, at least," she responded.

"Under hopeless disadvantages, I fear," he said.

"Would you advise that we let them alone?" she inquired.

"No, but they ought to have something more done for them—something more and of a different kind. Your teaching will go to waste, otherwise. You will find that parental influence will quite overbalance yours."

"I am ready to learn," she said; "but until I do learn I shall work in the old way."

"Oh, tell us about Bob Spencer," said Miss Ilmansee, who was getting somewhat bored by the character of the discussion, in which she was incompetent to bear a part.

Miss Coates laughed. She had a good deal to tell, beyond what she had reported on the night of her visit to the Spencer family. Even Glezen had heard nothing of her Sunday experiences, and when, in her

own lively and graphic way, she related the incidents of her memorable encounter with one who was so very sure that he was a bad boy, his merriment was without bounds. He walked the room and clapped his hands, and roared with laughter.

"Good!" he exclaimed. "Good! Now you touch what you call the vital point. These fellows all need flogging—every man and boy of them. I tell you that what we call the Christian amenities and forbearances are lost on this whole crew. They don't understand them, and they despise them. Bob Spencer is not a pauper exactly, but he is in danger of becoming one, by his associations; and I believe his soul is as good as saved. Didn't he fight?"

"How could he?"

"And has he been to your school again?"

"Regularly."

"How does he behave?"

"He not only behaves well himself, but he keeps the other boys in order, and I believe he would fight for me at the shortest notice against the greatest odds."

"Now here's a reformation worth having," said Glezen. "Don't leave chastisement out of your scheme, Nicholas. I tell you it's worth more than all your preaching and teaching. Knock the wickedness out of them, and drive the goodness in. Sentiment is lost in this business. Miss Coates has made my life brighter from this hour, and Bob Spencer has become very dear to my heart. I'll engage him for an office-boy to-morrow."

"Oh, will you?" said Miss Coates with delight.

"Don't strike me!" said Glezen, dodging, as if he expected a blow. "I assure you I meant him no harm. I'll dress him in a blue roundabout with brass buttons, and lavish my wasting affections upon him."

The reader has already perceived that Glezen had a sharper bark than bite, and that while he assumed the attitude of an outside critic, he was quite ready to second, in any practical way that was possible to a man absorbed in his own affairs, the operations of the enthusiasts around him. His interest in his new clerk was genuine, and his knowledge of men enabled him to manage him with prudent skill. He saw that Bob Spencer had been thoroughly shamed, and brought to a "realizing sense" of the fact that he was not a very bad boy after all. That he had been heartily flogged, and had responded kindly to the influence of the discipline, won his heart for the boy.

"You are very kind," said Miss Coates.

"Up to the measure of my interests and the capacities of my office—that's all," said he. "You must see," he went on, "that I cannot do any more for you. I'm not the keeper of a museum for the storage of your trophies. You will be obliged to enlarge your acquaintance. I can take care of one or two of the first drops, but, when the shower comes, buckets will not do. You will be obliged to build a reservoir."

When the laugh that followed Glezen's words had subsided, Miss Larkin said:

"There is one subject that I would like to hear discussed to-night. I need to be instructed upon it, for, as it stands now in my mind, it is a burden upon my judgment and my conscience."

"Broach it, by all means," said Glezen, promptly. "Knowledge is of no account in this company, so long as we have a man here who sees. Ladies, Mr. Minturn awaits the question."

"I'm very much in earnest, Mr. Glezen," said Miss Larkin, "so please don't make fun of me, or of anybody. You know that the times are very hard. The poor throughout the city are suffering, and we are all called upon to help them. Now, the question as to what we who have money can do for them, without injuring them, is a very important one. I have felt as if I could not spend a penny on myself—as if I ought to curtail my comforts, and drop all my luxuries. It somehow seems when I purchase anything for my own gratification, as if I were taking the bread out of mouths that are starving. My life is really made quite unhappy by this thought."

"Put her out of her misery at once, Nicholas," said Glezen. "If you don't, I shall be obliged to do it myself."

"Perhaps we had better learn what the wisdom of the world says first," said Nicholas, with a laugh, "and, if that fails, we'll fall back on the unsophisticated instinct."

"Well," said Glezen, "I suppose I am a little heterodox on this matter. One fact, however, we may all regard as established, viz., that it is a curse to a poor man to give him what his labor can fairly earn. I know it is the custom of rich people, when hard times come down upon the community, to cut off their luxuries, and all unnecessary expenditures, not because they cannot afford them, but from the fear of some disaster that may come to them. They give up their carriages, stop dining their friends, suppress their social assemblies, cease buying clothes,

and by every action and all their policy do what they can to deprive those who have ministered to their artificial wants—to their extravagances, if you please—of employment. When they have done this, and brought about a state of starvation among those who have depended upon them, then they wonder whether they had better make paupers of them or set them to work."

"Bravo!" exclaimed Nicholas.

"I see, and I thank you," said Miss Larkin.

"Don't thank me," said Glezen. "Spare my blushes. You embarrass me."

"Go on," said Miss Coates, who was getting new ideas, and arriving at the practical center of the subject much quicker than she had expected to.

"Well, it seems to me," Glezen proceeded, "that if ever there is a time in a rich man's life when he should indulge in luxuries, or, perhaps, I should say, use his money in such a way as to give people work to do, it is in a time of depression like this. If he has building to do, let him build. Materials and labor are cheap, and he will never have so good a time again. He certainly will not if he waits until better times arrive. Instead of this, he shuts up his purse, curtails his expenses, and waits while people starve. The truth is that half the evils which the poor are feeling now come from the rich man's short-sightedness and cowardliness. Every luxury that he indulges in gives work to somebody. Every enterprise that he engages in, puts bread into hungry mouths. I should say that every rich man who cuts off his luxuries in a time like this, or fails to devise all possible schemes to keep the poor employed, and then sits down and doles out his money to keep them from starving, most lamentably fails of doing his duty. I'm not a rich man, but if any of my good friends have more money than they know what to do with, I advise them to spend it for something that will give work to idle hands,—to do this at once, and do it all the time. The work that produces a garment which you procure as a luxury, is to the person who makes it a necessity. The house which you build in a time of depression, helps to bring the better time when you can get a good rent for it. The fact is that the good time we are all waiting for is locked up in the form of money in the coffers of those who refuse to use it to their own advantage, as well as to the advantage of those who are suffering for lack of labor."



"I'm sure I don't think you are very heterodox," said Miss Larkin. "I am sure you have common sense on your side, and I know that my way seems much clearer to me, and that I feel very much relieved."

"So say we all," said Nicholas.

Glezen rose to his feet, placed his hand upon his heart, and made a low bow. "I am very much honored," he said. "Ask me another."

At this moment Nicholas drew his handkerchief from his pocket, and, as he shook it out, a letter fell to the floor. He picked it up, and, looking at it, he said:

"Here is a note that was handed to me by the postman as I was leaving home to-night. I had forgotten it. Permit me to open it."

He broke the seal, and the others observed him with curious interest while he read it, for his countenance betrayed surprise and wonder.

"Shall I read this to you?" he inquired.

"Do so," from all.

As he reads it, it is not necessary for us to look over his shoulder and report the wretched orthography in which the note is couched, but we will take it from his lips.

"MR. MINTURN:—It is best for you not to show your head at 'The Crown and Crust' again. You are spotted, and you'll be took care of by them as knows you. You can't catch me if you try, so give that up. If you want to talk about the bonds, there's ways of doing it. The silver you will never see again. That's gone; but the bonds are placed, and you can get them if you are willing to come down handsome. I haven't got 'em, but I know where they be, and I can tell you where they be, but you'll have to show the color of your money. I advise you as a friend to keep out of our part of the town, but the bonds are nearer to you than you know, and you can have 'em if you'll pay. Write to Bill Sanders, and the letter'll come to me, but that's not my name."

The little company were very much excited over the letter.

"Let me see it," said Glezen.

He took it, and read it through.

"It's genuine, I think," he said, as he handed it back.

"What shall I do with it, or do about it?" inquired Nicholas.

"Do nothing in a hurry," Glezen replied.

"I will see you again about it."

"I'm sure it's genuine," said Nicholas, who remembered and then recounted to his companions the bootless chase he had indulged in, on the night of his visit to "The Crown and Crust."

"The fellow is out of money again," said Nicholas, "and does not dare to offer his

bonds in the market. He undoubtedly supposes that I know their numbers, and that Wall street knows them."

The incident of the letter quite diverted the thoughts of the company from the topics they had met to discuss, and, after a desultory conversation, the visitors rose to take their leave.

"Don't go yet," said Nicholas. "I will be with you in a moment."

He passed out of the door with the intention of showing the letter to Mr. Benson. Arriving at the library, where he knew that gentleman always spent his evenings, he paused, and overheard voices. Mr. Benson had company. Nicholas hesitated. He was standing within three feet of his own bonds. He could not suspect it, of course, but there was a strange influence upon him. He had no love for Mr. Benson, but he felt that he must see him. The earnest conversation that was in progress in the room withheld him, however, and he turned reluctantly away, and rejoined his friends.

Soon they all went out together, and as Nicholas passed Mr. Benson's door, he paused. Then he went half-way down the stairs, and paused again, turned, and started to go back. He finally concluded that he would not return, and then he hurriedly ran down the stairs into the street.

Why did he not carry out his purpose? What was it that suggested it, and urged him to it? Some spiritual influence was upon him to which he was unaccustomed. Some angel was whispering to him, though he could not understand the language. He did not know how much he had done, or failed to do, to decide Mr. Benson's fate. He could not know that the man from whom he had turned away was passing through a great temptation, and that, debased as he had been in many respects, he would have been glad of any occasion that would compel him to put the terrible bonds out of his hands.

He had now had them in his possession for several weeks. They had begun to seem like his property. In his own mind, they were beginning to form a part of the barrier that he was trying to build between himself and bankruptcy. As a last resort, he could raise money on them, and, although they were not his, he did not absolutely know whose they were. The man who had delivered them to him did not own them—that was certain. Was it a kind Providence that had placed them in his hands? Who could tell? Would it not be just as well

for the bonds to serve temporarily his purposes, who was trying to save himself and preserve his trusts, as to lie idle in his safe?

While these sophistries were exercising his mind, he knew that he was debasing himself, but there was a strange feeling of helplessness within him, as if the good angel and the bad angel of his life were engaged in a struggle for his soul.

If in this mood Nicholas had found him, and shown him the letter he had received, he would have hailed the message of the robber as a message from God. That would have decided the matter. He might not at that moment have surrendered the property,

but he would have seen the impossibility of using it for himself. He would have been placed beyond the reach of a tormenting temptation—a temptation to use that which was not his by any valid title, and a temptation to bring himself to the belief that wrong was right.

Ah! if Nicholas had only gone in when he intended to go in, how different it all might have been with Mr. Benson! If he had known what the result of his visit would have been upon the man who disliked and even hated him, he would, if necessary, have burst in the door. But he did not go in.

(To be continued.)

### "LE MONSIEUR DE LA PETITE DAME."

It was Madame who first entered the box, and Madame was bright with youthful bloom, bright with jewels, and, moreover, a beauty. She was a little creature, with childishly large eyes, a low, white forehead, reddish-brown hair, and Greek nose and mouth.

"Clearly," remarked the old lady in the box opposite, "not a Frenchwoman. Her youth is too girlish, and she has too petulant an air of indifference."

This old lady in the box opposite was that venerable and somewhat severe aristocrat, Madame de Castro, and having gazed for a moment or so a little disapprovingly at the new arrival, she turned her glasses to the young beauty's companion and uttered an exclamation.

It was at Monsieur she was looking now. Monsieur had followed his wife closely, bearing her fan and bouquet and wrap, and had silently seated himself a little behind her and in the shadow.

"*Ciel!*" cried Madame de Castro, "what an ugly little man!"

It was not an unnatural exclamation. Fate had not been so kind to the individual referred to as she might have been—in fact she had been definitely cruel. He was small of figure, insignificant, dark, and wore a patient sphynx-like air of gravity. He did not seem to speak or move, simply sat in the shadow holding his wife's belongings, apparently almost entirely unnoticed by her.

"I don't know him at all," said Madame de Castro; "though that is not to be won-

dered at, since I have exiled myself long enough to forget and be forgotten by half Paris. What is his name?"

The gentleman at her side—a distinguished-looking old young man, with a sarcastic smile—began with the smile, and ended with a half laugh.

"They call him," he replied, "Le Monsieur de la petite Dame. His name is Villefort."

"Le Monsieur de la petite Dame," repeated Madame, testily. "That is a title of new Paris—the Paris of your American and English. It is villainously ill-bred."

M. Renard's laugh receded into the smile again, and the smile became of double significance.

"True," he acquiesced, "but it is also villainously apropos. Look for yourself."

Madame did so, and her next query, after she had dropped her glass again, was a sharp one.

"Who is she—the wife?"

"She is what you are pleased to call one of our Americans! You know the class,"—with a little wave of the hand,—"*rich, unconventional, comfortable people, who live well and dress well, and have an incomprehensibly naïve way of going to impossible places and doing impossible things by way of enjoyment. Our fair friend there, for instance, has probably been round the world upon several occasions, and is familiar with a number of places and objects of note fearful to contemplate. They came here as tourists, and became fascinated with*

European life. The most overwhelming punishment which could be inflicted upon that excellent woman, the mother, would be that she should be compelled to return to her New York, or Philadelphia, or Boston, whichever it may be."

"Humph!" commented Madame. "But you have not told me the name."

"Madame Villefort's? No, not yet. It was Trent—Mademoiselle Bertha Trent."

"She is not twenty yet," said Madame, in a queer, grumbling tone. "What did she marry that man for?"

"God knows," replied M. Renard, not too devoutly, "Paris does not."

For some reason best known to herself, Madame de Castro looked angry. She was a shrewd old person, with strong whims of her own, even at seventy. She quite glared at the pretty American from under her bushy eyebrows.

"Le Monsieur de la petite Dame!" she fumed. "I tell you it is low—low to give a man such names."

"Oh!" returned Renard, shrugging his shoulders, "we did not give it to him. It was an awkward servant who dubbed him so at first. She was new to her position, and forgot his name, and being asked who had arrived, stumbled upon this *bon mot*: '*Un monsieur, Madame—le monsieur de la petite dame*,'—and, being repeated and tossed lightly from hand to hand, it has become at last an established witticism, albeit banded under breath."

It was characteristic of the august De Castro that during the remainder of the evening's entertainment she should occupy herself more with her neighbors than with the opera. She aroused M. Renard to a secret ecstasy of mirth by the sharp steadiness of her observation of the inmates of the box opposite them. She talked about them, too, in a tone not too well modulated, criticising the beautifully dressed little woman, her hair, her eyes, her Greek nose and mouth, and, more than all, her indifferent expression and her manner of leaning upon the edge of her box and staring at the stage as if she did not care for, and indeed scarcely saw, what was going on upon it.

"That is the way with your American beauties," she said. "They have no respect for things. Their people spoil them—their men especially. They consider themselves privileged to act as their whims direct. They have not the gentle timidity of French women. What French girl would have the *sang froid* to sit in one of the best boxes of

the Nouvelle Opéra and regard, with an actual air of *ennui*, such a performance as this. She does not hear a word that is sung."

"And we—do we hear?" bantered M. Renard.

"*Puff!*" cried Madame. "We! We are world-dried and weather-beaten. We have not a worm-eaten emotion between us. I am seventy, and you, who are thirty-five, are the older of the two. Bah! At that girl's age I had the heart of a dove."

"But that is long ago," murmured M. Renard, as if to himself. It was quite human that he should slightly resent being classed with an unamiable grenadier of seventy.

"Yes!" with considerable asperity. "Fifty years!" Then, with harsh voice and withered face melted suddenly into softness quite *naïve*, "*Mon Dieu!*" she said, "Fifty years since Arsène whispered into my ear at my first opera, that he saw tears in my eyes!"

It was at this instant that there appeared in the Villefort box a new figure,—that of a dark, slight young man of graceful movements,—in fact, a young man of intensely striking appearance. M. Villefort rose to receive him with serious courtesy, but the pretty American was not so gracious. Not until he had seated himself at her side and spoken to her did she turn her head and permit her eyes simply to rest upon his face.

M. Renard smiled again.

"Enter," he remarked in a low tone,—  
"enter M. Ralph Edmonstone, the cousin of Madame."

His companion asked no questions, but he proceeded, returning to his light and airy tone:

"M. Ralph Edmonstone is a genius," he said. "He is an artist, he is a poet, he is also a writer of subtle prose. His sonnets to Euphrasie—in the day of Euphrasie—awakened the admiration of the sternest critics: they were so tender, so full of purest fire! Some of the same critics also could scarcely choose between these and his songs to Aglaë in her day, or Camille in hers. He is a young man of fine fancies, and possesses the amiable quality of being invariably passionately in earnest. As he was serious in his sentiments yesterday, so he will be to-morrow, so he is to-day."

"To-day!" echoed Madame de Castro. "Nonsense!"

Madame Villefort did not seem to talk much. It was M. Ralph Edmonstone who conversed, and this, too, with so much of the charm of animation that it was pleasurable even to be a mere looker-on. One involuntarily strained one's ears to catch a

sentence,—he was so eagerly absorbed, so full of rapid, gracefully unconscious and unconventional gesture.

"I wonder what he is saying?" Madame de Castro was once betrayed into exclaiming.

"Something metaphysical, about a poem, or a passage of music, or a picture,—or perhaps his soul," returned M. Renard. "His soul is his strong point,—he pets it and wonders at it. He puts it through its paces. And yet, singularly enough, he is never ridiculous—only fanciful and *naïve*. It is his soul which so fascinates women."

Whether this last was true of other women or not, Madame Villefort scarcely appeared fascinated. As she listened, her eyes still rested upon his eager, mobile face, but with a peculiar expression,—an expression of critical attention, and yet one which somehow detracted from her look of youth, as if she weighed his words as they fell from his lips and classified them without any touch of the enthusiasm which stirred within himself.

Suddenly she rose from her seat and addressed her husband, who immediately rose also. Then she spoke to M. Edmondstone, and without more ado, the three left the box,—the young beauty, a little oddly, rather followed than accompanied by her companions,—at the recognition of which circumstance Madame de Castro uttered a series of sharp ejaculations of disapproval.

"Bah! Bah!" she cried. "She is too young for such airs!—as if she were Madame l'Impératrice herself! Take me to my carriage. I am tired also."

Crossing the pavement with M. Renard, they passed the carriage of the Villeforts. Before its open door stood M. Villefort and Edmondstone, and the younger man, with bared head, bent forward speaking to his cousin.

"If I come to-morrow," he was saying, "you will be at home, Bertha?"

"Yes."

"Then, good-night,"—holding out his hand,—"only I wish so that you would go to the Aylmers' instead of home. That *protégée* of Mrs. Aylmer's—the little singing girl—would touch your heart with her voice. On hearing her, one thinks at once of some shy wild bird high in a clear sky,—far enough above earth to have forgotten to be timid."

"Yes," came quietly from the darkness within the carriage; "but I am too tired to care about voices just now. Good-night, Ralph!"

M. Renard's reply of "God knows, Paris

does not," to Madame de Castro's query as to why Madame Villefort had married her husband, contained a strong element of truth, and yet there were numbers of Parisian-Americans, more especially the young, well-looking and masculine, who at the time the marriage had taken place had been ready enough with sardonic explanations.

"There are women who are avaricious enough to sell their souls," they cried; "and the maternal Trent is one of them. The girl is only to blame for allowing herself to be bullied into the match."

"But the weak place in this argument," said M. Renard, "is that the people are too rich to be greatly influenced by money. If there had been a title,—but there was no title."

Neither did Bertha Trent comport herself like a cowed creature. She took her place in society as Madame Villefort in such a manner as could give rise to no comment whatever; only one or two of the restless inquisitive wondered if they had not been mistaken in her. She was, as I have said already, a childishly small and slight creature,—the kind of woman to touch one with suggestions of helplessness and lack of will; and yet, notwithstanding this, a celebrated artist—a shrewd, worldly-wise old fellow—who had painted her portrait, had complained that he was not satisfied with it because he had not done justice to "the obstinate endurance in her eye."

It was to her cousin, Ralph Edmondstone, he had said this with some degree of testiness, and Edmondstone had smiled and answered:

"What! have you found that out? Few people do."

At the time of the marriage Edmondstone had been in Rome singing his wings in the light of the eyes of a certain Marchesa who was his latest poetic passion. She was not his first fancy, nor would she be his last, but she had power enough for the time being to have satisfied the most exacting of women.

He was at his banker's when he heard the news spoken of as the latest item from American Paris, and his start and exclamation of disgust drew forth some cynical after-comment from men who envied him.

"Who?" he said, with indiscreet impatience. "That undersized sphynx of a Villefort? Faugh!"

But insignificant though he might be, it was M. Villefort who had won, and if he was nothing more, he was at least a faithful

attendant. Henceforth, those who saw his wife invariably saw him also,—driving with her in her carriage, riding with her courageously if ungracefully, standing or seated near her in the shadow of her box at the Nouvelle Opéra, silent, impassive, grave, noticeable only through the contrast he afforded to her girlish beauty and bloom.

"Always there!" commented a sharp American belle of mature years, "like an ugly little Conscience."

Edmondstone's first meeting with his cousin after his return to Paris was accidental. He had rather put off visiting her, and one night, entering a crowded room, he found himself standing behind a girl's light figure and staring at an abundance of reddish-brown hair. When, almost immediately the pretty head to which this hair belonged turned with a slow, yet involuntary-looking movement toward him, he felt that he became excited without knowing why.

"Ah, Bertha!" he exclaimed.

She smiled a little and held out her hand, and he immediately became conscious of M. Villefort being quite near and regarding him seriously.

It was the perverseness of fate that he should find in Bertha Villefort even more than he had once seen in Bertha Trent, and there had been a time when he had seen a great deal in Bertha Trent. In the Trent household he had been a great favorite. No social evening or family festivity had seemed complete without his presence. The very children had felt that they had a claim upon his good-humor and his tendency to break forth into whimsical frolic. Good Mrs. Trent had been wont to scold him and gossip with him. He had read his sonnets and metaphysical articles to Bertha, and occasionally to the rest; in fact his footing in the family was a familiar and firmly established one. But since her marriage Bertha had become a little incomprehensible, and on that account a little more interesting. He was sure she had developed, but could not make out in what direction. He found occasion to reproach her sometimes with the changes he found in her.

"There are times when I hardly know you," he would say, "you are so finely orthodox and well controlled. It was not so with you once, Bertha. Don't—don't become that terrible thing, a fine lady, and worse still, a fine lady who is *désillusionnée*."

It baffled him that she never appeared much moved by his charges. Certainly she lived the life of a "fine lady,"—a brilliant

life, a luxurious one, a life full of polite dissipation. Once, when in a tenderly fraternal mood, he reproached her with this also, she laughed at him frankly.

"It is absinthe," she said. "It is my absinthe at least, and who does not drink a little absinthe—of one kind or another?"

He was sincerely convinced that from this moment he understood and had the right to pity and watch over her. He went oftener to see her. In her presence he studied her closely, absent he brooded over her. He became impatiently intolerant of M. Villefort and prone to condemn him, he scarcely knew for what.

"He has no dignity—no perception," was his mental decision. "He has not even the delicacy to love her, or he would have the tenderness to sacrifice his own feelings and leave her to herself. I could do it for a woman I loved."

But M. Villefort was always there,—gravely carrying the shawls, picking up handkerchiefs, and making himself useful.

"*Imbécile!*" muttered M. Renard under cover of his smile and his mustache, as he stood near his venerable patroness the first time she met the Villeforts.

"Blockhead!" stealthily ejaculated that amiable aristocrat. But though she looked grimly at M. Villefort, M. Renard was uncomfortably uncertain that it was he to whom she referred.

"Go and bring them to me," she commanded. "Go and bring them to me before some one else engages them. I want to talk to that girl."

It was astonishing how agreeable she made herself to her victims when she had fairly entrapped them. Bertha hesitated a little before accepting her offer of a seat at her side, but once seated she found herself oddly amused. When Madame de Castro chose to rake the embers of her seventy years, many a lively coal discovered itself among the ashes.

Seeing the two women together, Edmondstone shuddered in fastidious protest.

"How could you laugh at that detestable old woman?" he exclaimed on encountering Bertha later in the evening. "I wonder that M. Villefort would permit her to talk to you. She is a wicked, cynical creature, who has the hardihood to laugh at her sins instead of repenting of them."

"Perhaps that is the reason she is so amusing," said Bertha.

Edmondstone answered her with gentle mournfulness.



"What!" he said. "Have you begun to say such things? You too, Bertha——"

The laugh with which she stopped him was both light and hard.

"Where is M. Villefort?" she asked. "I have actually not seen him for fifteen minutes. Is it possible that Madame de Castro has fascinated him into forgetting me?"

Edmondstone went to his hotel that night in a melancholy mood. He even lay awake to think what a dreary mistake his cousin's marriage was. She had been such a tender and easily swayed little soul as a girl, and now it really seemed as if she was hardening into a woman of the world. In the old times he had been wont to try his sonnets upon Bertha as a musician tries his chords upon his most delicate instrument. Even now he remembered certain fine, sensitive expressions of hers which had thrilled him beyond measure.

"How could she marry such a fellow as that—how could she?" he groaned. "What does it mean? It must mean something."

He was pale and heavy-eyed when he wandered round to the Villeforts' the following morning. M. Villefort was sitting with Bertha and reading aloud. He stopped to receive their visitor punctiliously and inquire after his health.

"M. Edmondstone cannot have slept well," he remarked.

"I did not sleep at all," Edmondstone answered, "and naturally have a headache."

Bertha pointed to a wide lounge of the *pousif* order.

"Then go to sleep now," she said, "M. Villefort will read. When I have a headache he often reads me to sleep, and I am always better on awaking."

Involuntarily Edmondstone half frowned. Absurdly enough, he resented in secret this amiability on the part of M. Villefort toward his own wife. He was quite prepared to be severe upon the reading, but was surprised to be compelled to acknowledge that M. Villefort read wondrously well, and positively with hints of delicate perception. His voice was full and yet subtly flexible. Edmondstone tried to protest against this also, but uselessly. Finally he was soothed, and from being fretfully wide-awake suddenly passed into sleep as Bertha had commanded. How long his slumber lasted he could not have told all at once. He found himself aroused and wide-awake as ever. His headache had departed; his every sense seemed to have gained keenness. M. Villefort's

voice had ceased, and for a few seconds utter dead silence reigned. Then he heard the fire crackling, and shortly afterward a strange, startling sound—a sharp grasping sob!

The pang which seized upon him was strong indeed. In one moment he seemed to learn a thousand things by intuition—to comprehend her, himself, the past. Before he moved he knew that Villefort was not in the room, and he had caught a side glimpse of the pretty blue of Bertha's dress.

But he had not imagined the face he saw when he turned his head to look at her. She sat in a rigid attitude, leaning against the high cushioned back of her chair, her hands clasped above her head. She stood at the fire with eyes wide and strained, with the agony of tears unshed, and amid the rush of all other emotions he was peculiarly conscious of being touched by the minor one of his recognition of her look of extreme youth—the look which had been wont to touch people in the girl, Bertha Trent. He had meant to speak clearly, but his voice was only a loud whisper when he sprang up, uttering her name.

"Bertha! Bertha! Bertha!" as he flung himself upon his knees at her side.

Her answer was an actual cry, and yet it reached no higher pitch than his own intense whisper.

"I thought you were asleep?"

Her hands fell and he caught them. His sad impassioned face bowed itself upon her palms.

"I am awake, Bertha," he groaned. "I am awake—at last."

She regarded him with a piteous, pitying glance. She knew him with a keener, sadder knowledge than he would ever comprehend; but she did not underestimate the depth of his misery at this one overwhelming moment. He was awake indeed and saw what he had lost.

"If you could but have borne with me a little longer," he said. "If I had only not been so shallow and so blind. If you could but have borne with me a little longer!"

"If I could but have borne with myself a little longer," she answered. "If I could but have borne a little longer with my poor base pride! Because I suffered myself, I have made another suffer too."

He knew she spoke of M. Villefort, and the thought jarred upon him.

"He does not suffer," he said. "He is not of the fiber to feel pain."

And he wondered why she shrank from him a little, and answered with a sad bitterness:

"Are you sure? You did not know that I——"

"Forgive me," he said brokenly, the face he lifted, haggard with his unhappiness. "Forgive me, for I have lost so much."

She wasted few words and no tears. The force and suddenness of his emotion and her own had overborne her into this strange unmeant confession; but her mood was unlike his,—it was merely receptive. She listened to his unavailing regrets, but told him little of her own past.

"It does not matter," she said drearily. "It is all over. Let it rest. The pain of to-day and to-morrow is enough for us. We have borne yesterday; why should we want it back again?"

And when they parted she said only one thing of the future:

"There is no need that we should talk. There is nothing for us beyond this point. We can only go back. We must try to forget—and be satisfied with our absinthé."

Instead of returning to his hotel, Edmondstone found his way to the Champs Élysées, and finally to the Bois. He was too wretched to have any purpose in his wanderings. He walked rapidly, looking straight before him and seeing nobody. He scarcely understood his own fierce emotions. Hitherto his fancies had brought him a vague rapture; now he experienced absolute anguish. Every past experience had become trivial. What happiness is so keen as one's briefest pain? As he walked he lived again the days he had thrown away. He remembered a thousand old, yet new, phases of Bertha's girlhood. He thought of times when she had touched or irritated or pleased him. When he had left Paris for Rome he had not bidden him good-bye. Jenny, her younger sister, had told him that she was not well.

"If I had seen her then," he cried inwardly, "I might have read her heart—and my own."

M. Renard, riding a very tall horse in the Bois, passed him and raised his eyebrows at the sight of his pallor and his fagged yet excited look.

"There will be a new sonnet," he said to himself. "A sonnet to Despair or Melancholy or Loss."

Afterward, when society became a little restive and eager, M. Renard looked on with sardonic interest.

"That happy man, M. Villefort," he said to Madame de Castro, "is a good soul—a good soul. He has no small jealous follies," and his smile was scarcely a pleasant thing to see.

"There is nothing for us beyond this past," Bertha had said, and Edmondstone had agreed with her hopelessly.

But he could not quite break away. Sometime for a week the Villeforts missed him, and then again they saw him every day. He spent his mornings with them, joined them in their drives, at their opera-box or at the entertainments of their friends. He also fell into his old place in the Trent household, and listened with a vague effort at interest to Mrs. Trent's maternal gossip about the boys' college expenses, Bertha's household and Jenny's approaching social *début*. He was continually full of a feverish longing to hear of Bertha,—to hear her name spoken, her ingoings and outcomings discussed, her looks, her belongings.

"The fact is," said Mrs. Trent, as the winter advanced, "I am anxious about Bertha. She does not look strong. I don't know why I have not seen it before, but all at once I found out yesterday that she is really thin. She was always slight and even a little fragile, but now she is actually thin. One can see the little bones in her wrists and fingers. Her rings and her bracelets slip about quite loosely."

"And talking of being thin, mother," cried Jenny, who was a frank, bright sixteen-year-old, "Look at cousin Ralph himself. He has little hollows in his cheeks, and his eyes are as much too big as Bertha's. Is the sword wearing out the scabbard, Ralph? That is what they always say about geniuses, you know."

"Ralph has not looked well for some time," said Mrs. Trent. "As for Bertha, I think I shall scold her a little, and M. Villefort too. She has been living too exciting a life. She is out continually. She must stay at home more and rest. It is rest she needs."

"If you tell Arthur that Bertha looks ill——" began Jenny.

Edmondstone turned toward her sharply. "Arthur!" he repeated. "Who is Arthur?"

Mrs. Trent answered with a comfortable laugh.

"It is M. Villefort's name," she said, "though none of us call him Arthur but Jenny. Jenny and he are great friends."

"I like him better than any one else," said Jenny stoutly. "And I wish to set a good example to Bertha, who never calls him anything but M. Villefort, which is absurd. Just as if they had been introduced to each other about a week ago."

"I always hear him address her as Madame Villefort," reflected Edmondstone, somewhat gloomily.

"Oh yes!" answered Jenny, "that is his French way of studying her fancies. He would consider it taking an unpardonable liberty to call her 'Bertha,' since she only favors him with 'M. Villefort.' I said to him only the other day, 'Arthur, you are the oddest couple! You're so grand and well-behaved, I cannot imagine you scolding Bertha a little, and I have never seen you kiss her since you were married.' I was half frightened after I had said it. He started as if he had been shot, and turned as pale as death. I really felt as if I had done something frightfully improper."

"The French are so different from the Americans," said Mrs. Trent, "particularly those of M. Villefort's class. They are beautifully punctilious, but I don't call it quite comfortable, you know."

Her mother was not the only person who noticed a change in Bertha Villefort. Before long it was a change so marked that all who saw her observed it. She had become painfully frail and slight. Her face looked too finely cut, her eyes had shadowy hollows under them, and were always bright with a feverish excitement.

"What is the matter with your wife?" demanded Madame de Castro of M. Villefort. Since their first meeting she had never loosened her hold upon the husband and wife, and had particularly cultivated Bertha.

There was no change in the expression of M. Villefort; but he was strangely pallid as he made his reply.

"It is impossible for me to explain, Madame."

"She is absolutely attenuated," cried Madame. "She is like a spirit. Take her to the country—to Normandy—to the sea—somewhere! She will die if there is not a change. At twenty, one should be as plump as a young capon."

A few days after this, Jenny Trent ran in upon Bertha as she lay upon a lounge, holding an open book, but with closed eyes. She had come to spend the morning, she announced. She wanted to talk—about people, about her dress, about her first ball which was to come off shortly.

"And Arthur says —" she began.

Bertha turned her head almost as Edmondstone had done.

"Arthur," she repeated.

For the second time Jenny felt a little embarrassed. "I mean M. Villefort," she said, hesitantly.

She quite forgot what she had been going to say, and for a moment or so regarded the fire quite gravely. But naturally this could not last long. She soon began to talk again, and it was not many minutes before she found M. Villefort in her path once more.

"I never thought I could like a Frenchman so much," she said in all enthusiastic good faith. "At first, you know," with an apologetic half laugh, "I wondered why you had not taken an American instead, when there were so many to choose from, but now I understand it. What beautiful tender things he can say, Bertha, and yet not seem in the least sentimental. Everything comes so simply right from the bottom of his heart. Just think what he said to me yesterday when he brought me those flowers. He helps me with mine, and it is odd how things will cheer up and grow for him. I said to him, 'Arthur, how is it that no flower ever fails you?' and he answered in the gentlest quiet way, 'Perhaps because I never fail them. Flowers are like people,—one must love and be true to them, not only to-day and to-morrow, but every day—every hour—always.' And he says such things so often. That is why I am so fond of him."

As she received no reply, she turned toward the lounge. Bertha lay upon it motionless and silent,—only a large tear trembled on her cheek. Jenny sprang up, shocked and checked, and went to her.

"Oh, Bertha!" she cried, "how thoughtless I am to tire you so, you poor little soul! Is it true that you are so weak as all that? I heard mamma and Arthur talking about it, but I scarcely believed it. They said you must go to Normandy and be nursed."

"I don't want to go to Normandy," said Bertha. "I—I am too tired. I only want to lie still and rest. I have been out too much."

Her voice, however, was so softly weak that in the most natural manner Jenny was subdued into shedding a few tears also, and kissed her quite fervently.

"Oh, Bertha!" she said, "you must do anything—anything that will make you well—if it is only for Arthur's sake. He loves you so—so terribly."

Whereupon Bertha laughed a little hysterically.

"Does he," she said, "love me so 'terribly?' Poor M. Villefort!"

She did not go to Normandy, however, and still went into society, though not as much as had been her habit. When she spent her evenings at home, some of her own family generally spent them with her, and M. Villefort or Edmondstone read aloud or talked.

In fact, Edmondstone came oftener than ever. His anxiety and unhappiness grew upon him and made him moody, irritable and morbid.

One night, when M. Villefort had left them alone together for a short time, he sprang from his chair and came to her couch, shaken with suppressed emotion.

"That man is killing you!" he exclaimed. "You are dying by inches! I cannot bear it!"

"It is not he who is killing me," she answered; and then M. Villefort returned to the room with the book he had been in search of.

In this case Edmondstone's passion took new phases. He wrote no sonnets, painted no pictures. He neglected his work, and spent his idle hours in rambling here and there in a gloomy, unsocial fashion.

"He looks," said M. Renard, "as if his soul had been playing him some evil trick."

He had at first complained that Bertha had taken a capricious fancy to Madame de Castro, but in course of time he found his way to the old woman's *salon* too, though it must be confessed that Madame herself never showed him any great favor. But this he did not care for. He only cared to sit in the same room with Bertha, and watch her every movement with a miserable tenderness.

One night, after regarding him cynically for some time, Madame broke out to Bertha with small ceremony.

"What a fool that young man is!" she exclaimed. "He sits and fairly devours you with his eyes. It is bad taste to show such an insane passion for a married woman."

It seemed as if Bertha lost at once her breath and every drop of blood in her body, for she had neither breath nor color when she turned and looked Madame de Castro in the face.

"Madame," she said, "if you repeat that to me, you will never see me again—never!"

Upon which Madame snapped her up with some anger at being so rebuked for her frankness.

"Then it is worse than I thought," she said.

It was weeks before she saw her young friend again. Indeed, it required some clever diplomacy to heal the breach made, and even in her most amusing and affectionate moods, she often felt afterward that she was treated with a reserve which held her at arm's length.

By the time the horse-chestnuts bloomed pink and white on the Avenue des Champs Élysées, there were few people in the Trent and Villefort circles who had not their opinions on the subject of Madame Villefort and her cousin.

There was a mixture of French and American gossip and comment, frank satire, or secret remark. But to her credit be it spoken, Madame de Castro held grim silence, and checked a rumor occasionally with such amiable ferocity as was not without its good effect.

The pink and white blossoms were already beginning to strew themselves at the feet of the pedestrians, when one morning M. Villefort presented himself to Madame and discovered her sitting alone in the strangest of moods.

"I thought I might have the pleasure of driving home with Madame Villefort. My servant informed me that I should find her here."

Madame de Castro pointed to a chair.

"Sit down," she commanded.

M. Villefort obeyed her in some secret but well-concealed amazement. He saw that she was under the influence of some unusual excitement. Her false front was pushed fantastically away, her rouge and powder were rubbed off in patches, her face looked set and hard. Her first words were abominably blunt.

"M. Villefort," she said, "do you know what your acquaintances call you?"

A deep red rose slowly to his face, but he did not answer.

"Do you know that you are designated by them by an absurd title—that they call you in ridicule 'Le Monsieur de la petite Dame?' Do you know that?"

His look was incomprehensible, but he bowed gravely.

"Madame," he answered, "since others have heard the title so often, it is but natural that I myself should have heard it more than once."

She regarded him in angry amazement. She was even roused to rapping upon the floor with her gold-headed cane.

"Does it not affect you?" she cried. "Does it not move you to indignation?"

"That, Madame," he replied, "can only be my affair. My friends will allow me my emotions at least."

Then she left her chair and began to walk up and down, striking the carpet hard with her cane at every step.

"You are a strange man," she remarked.

Suddenly, however, when just on the point of starting upon a fresh tour, she wheeled about and addressed him sharply.

"I respect you," she said; "and because I respect you, I will do you a good turn."

She made no pretense at endeavoring to soften the blow she was about to bestow. She drew forth from her dress a letter, the mere sight of which seemed to goad her to a mysterious excitement.

"See," she cried; "it was M. Ralph Edmondstone who wrote this,—it was to Madame Villefort it was written. It means ruin and dishonor. I offer it to you to read."

M. Villefort rose and laid his hand upon his chair to steady himself.

"Madame," he answered, "I will not touch it."

She struck herself upon her withered breast.

"Behold me!" she said. "*Me!* I am seventy years old! Good God! seventy! I am a bad old woman, and it is said I do not repent of my sins. I, too, have been a beautiful young girl. I, too, had my first lover. I, too, married a man who had not won my heart. It does not matter that the husband was worthy and the lover was not,—one learns that too late. My fate was what your wife's will be if you will not sacrifice your pride and save her."

"Pride!" he echoed in a little hollow voice. "My pride, Madame!"

She went on without noticing him:

"They have been here this morning—both of them. He followed her, as he always does. He had a desperate look which warned me. Afterward I found the note upon the floor. Now will you read it?"

"Good God!" he cried, as he fell into his chair again, his brow sinking into his hands.

"I have read it," said Madame, with a tragic gesture, "and I choose to place one stumbling-block in the path that would lead her to an old age like mine. I do not like

your Americans; but I have sometimes seen in her girl's face a proud, heroic endurance of the misery she has brought upon herself, and it has moved me. And this letter—you should read it, to see how such a man can plead. It is a passionate cry of despair—it is a poem in itself. I, myself, read it with sobs in my throat and tears in my eyes. 'If you love me!—if you have ever loved me!' he cries, 'for God's sake!—for love's sake!—if there is love on earth—if there is a God in heaven, you will not let me implore you in vain!' And his prayer is that she will leave Paris with him to-night—to-night! There! Monsieur, I have done. Behold the letter! Take it or leave it, as you please." And she flung it upon the floor at his feet.

She paused a moment, wondering what he would do.

He bent down and picked the letter up.

"I will take it," he said.

All at once he had become calm, and when he rose and uttered his last words to her, there was upon his face a faint smile.

"I, too," he said,—"*I, too, Madame, suffer from a mad and hopeless passion, and thus can comprehend the bitterness of M. Edmondstone's pangs. I, too, would implore in the name of love and God,—if I might,—but I may not.*" And so he took his departure.

Until evening Bertha did not see him. The afternoon she spent alone and in writing letters, and having completed and sealed the last, she went to her couch and tried to sleep. One entering the room, as she lay upon the violet cushions, her hands at her sides, her eyes closed, might well have been shocked. Her spotless pallor, the fine sharpness of her face, the shadows under her eyes, her motionlessness, would have excited the momentary feeling. But she was up and dressed for dinner when M. Villefort presented himself. Spring though it was, she was attired in a high, close dress of black velvet, and he found her almost cowering over the open fire-place. Strangely enough, too, she fancied that when she looked up at him she saw him shiver, as if he were struck with a slight chill also.

"You should not wear that," he said, with a half smile at her gown.

"Why?" she asked.

"It makes you so white—so much like a too early lily. But—but perhaps you thought of going out?"

"No," she answered; "not to-night."

He came quite close to her.

"If you are not too greatly fatigued," he



said, "it would give me happiness to take you with me on my errand to your mother's house. I must carry there my little birthday gift to your sister," smiling again.

An expression of embarrassment showed itself upon her face.

"Oh!" she exclaimed, "to think that I had forgotten it! She will feel as if I did not care for her at all."

She seemed for the moment quite unhappy.

"Let me see what you have chosen."

He drew from his pocket a case and opened it.

"Oh!" she cried, "how pretty and how suitable for a girl."

They were the prettiest, most airy set of pearls imaginable.

She sat and looked at them for a few seconds thoughtfully, and then handed them back.

"You are very good, and Jenny will be in ecstasies," she said.

"It is a happiness to me to give her pleasure," he returned. "I feel great tenderness for her. She is not like the young girls I have known. Her innocence is of a frank and noble quality, which is better than ignorance. One could not bear that the slightest shadow of sin or pain should fall upon her. The atmosphere surrounding her is so bright with pure happiness and the courage of youth."

Involuntarily he held out his hand.

"Will you ——" he began. His voice fell and broke. "Will you go with me?" he ended.

He saw that she was troubled.

"Now?" she faltered.

"Yes—now."

There was a peculiar pause,—a moment, as it seemed to him, of breathless silence. This silence she broke by her rising slowly from her seat.

"Yes," she responded, "I will go. Why should I not?"

It was midnight when they left the Trents', and Jenny stood upon the threshold, a bright figure in a setting of brightness, and kissed her hand to them as they went down the steps.

"I hope you will be better to-morrow, Arthur," she said.

He turned quickly to look up at her.

"I?"

"Yes. You look so tired. I might say haggard, if it was polite."

"It would not be polite," said Bertha, "so don't say it. Good-night, Jenny!"

But when they were seated in the carriage she glanced at her husband's face.

"Are you unwell?" she asked.

He passed his hand quickly across his forehead.

"A little fatigued," he replied. "It is nothing. To-morrow—to-morrow it will be all over."

And so silence fell upon them.

As they entered the drawing-room a clock chimed the half hour.

"So late as that!" exclaimed Bertha, and sank into a chair with a faint laugh. "Why, to-day is over," she said. "It is to-morrow."

M. Villefort had approached a side table. Upon it lay a peculiar-looking oblong box.

"Ah," he said, softly, "they have arrived."

"What are they?" Bertha asked.

He was bending over the box to open it, and did not turn toward her, as he replied:

"It is a gift for a young friend of mine,—an odd one,—a brace of pistols. He has before him a long journey in the East, and he is young enough to have a fancy for fire-arms."

He was still examining the weapons when Bertha crossed the room on her way upstairs, and she paused an instant to look at them.

"They are very handsome," she said. "One could almost wear them as ornaments."

"But they would have too threatening a look," he answered, lightly.

As he raised his eyes they met hers. She half started backward, moved by a new sense of the haggardness of his face.

"You are ill!" she exclaimed. "You are as colorless as marble."

"And you, too," he returned, still with the same tender lightness. "Let us hope that our 'to-morrow' will find us both better, and you say it is to-morrow now. Good-night!"

She went away without saying more. Weary as she was, she knew there was no sleep for her, and after dismissing her maid, she threw herself upon the lounge before the bedroom fire and lay there. To-night she felt as if her life had reached its climax. She burst into a passion of tears.

"Jenny! Jenny!" she cried, "how I envy —how I envy you!"

The recollection of Jenny shining in her pretty gala dress, and delighting in her birthday presents, and everybody else's pride and affection, filled her with a morbid misery and terror. She covered her face with her hands as she thought of it.

"Once," she panted, "as I looked at her

to-night for a moment, I almost hated her. Am I so bad as that?—am I?"

Scarcely two seconds afterward she had sprung to her feet and was standing by the side of her couch, her heart beating with a rapid throb of fright, her limbs trembling. A strange sound had fallen suddenly upon the perfect silence of the night—a sound loud, hard and sharp—the report of a pistol! What dread seized her she knew not. She was across the room and had wrenched the door open in an instant, then with flying feet down the corridor and the staircase. But half way down the stairs she began to cry out aloud, "Arthur! Arthur!" not conscious of her own voice—"Arthur, what is it?" The door of the drawing-room flew open before the fierce stroke of her palm.

M. Villefort stood where she had left him; but while his left hand supported his weight against the table, his right was thrust into his breast. One of the pistols lay at his feet.

She thought it was Death's self that confronted her in his face, but he spoke to her, trying faintly to smile.

"Do not come in," he said, "I have met with—an accident. It is nothing. Do not come in. A servant——"

His last recollection was of her white face and white draperies as he fell, and somehow, dizzy, sick and faint as he was, he seemed to hear her calling out, in a voice strangely like Jenny's, "Arthur! Arthur!"

In less than half an hour the whole house was astir. Upstairs physicians were with the wounded man, down-stairs Mrs. Trent talked and wept over her daughter, after the manner of all good women. She was fairly terrified by Bertha's strange shuddering, quick, strained breath, and dilated eyes. She felt as if she could not reach her—as if she hardly made herself heard.

"You must calm yourself, Bertha," she would say. "Try to calm yourself. We must hope for the best. Oh! how could it have happened!"

It was in the midst of this that a servant entered with a letter, which he handed to his mistress. The envelope bore upon it nothing but her own name.

She looked at it with a bewildered expression.

"For me?" she said.

"It fell from Monsieur's pocket as we carried him upstairs," replied the man.

"Don't mind it now, Bertha," said her mother. "Ah! poor M. Villefort!"

But Bertha opened it mechanically and was reading it.

At first it seemed as if it must have been written in a language she did not understand; but after the first few sentences a change appeared. Her breath came and went more quickly than before—a kind of horror grew in her eyes. At the last she uttered a low, struggling cry. The paper was crushed in her hand, she cast one glance around the room as if in bewildering search for refuge, and flung herself upon her mother's breast.

"Save me, mother!" she said. "Help me! If he dies now, I shall go mad!"

Afterward, in telling her story at home, good Mrs. Trent almost broke down.

"Oh, Jenny!" she said. "Just to think of the poor fellow's having had it in his pocket then! Of course I did not see it, but one can fancy that it was something kind and tender—perhaps some little surprise he had planned for her. It seemed as if she could not bear it.

M. Villefort's accident was the subject of discussion for many days. He had purchased a wonderful pair of pistols as a gift for a young friend. How it had happened that one had been loaded none knew; it was just possible that he had been seized with the whim to load it himself—at all events, it had gone off in his hands. An inch—nay, half an inch—to the right and Madame Villefort, who flew down-stairs at the sound of the report, would only have found a dead man at her feet.

"*Ma foi!*" said M. Renard, repressing his smile; "this is difficult for Monsieur, but it may leave '*la petite Dame*' at liberty."

Madame de Castro flew at him with flashing eyes.

"Silence!" she said, "if you would not have me strike you with my cane." And she looked as if she were capable of doing it.

Upon his sick bed M. Villefort was continually haunted by an apparition—an apparition of a white face and white draperies, such as he had seen as he fell. Sometimes it was here, sometimes there, sometimes near him, and sometimes indistinct and far away. Sometimes he called out to it and tried to extend his arms; again he lay and watched it murmuring gentle words, and smiling mournfully.

Mrs. Trent and the doctor were in despair. Madame Villefort obstinately refused to be forced from her husband's room. There were times when they thought she might sink and die there herself. She would not even leave it when they obliged her to sleep. Having been slight and frail from ill health

before, she became absolutely attenuated. Soon all her beauty would be gone.

"Do you know," said Mrs. Trent to her husband, "I have found out that she always carries that letter in her breast? I see her put her hand to it in the strangest way a dozen times a day."

One night, awakening from a long sleep to a clearer mental consciousness than usual, M. Villefort found his apparition standing over him.

She stood with one hand clinched upon her breast, and she spoke to him.

"Arthur!" she said,—"Arthur, do you know me?"

He answered her, "Yes."

She slipped down upon her knees, and held up in her hand a letter crushed and broken.

"Try to keep your mind clear while you listen to me," she implored. "Try—try! I must tell you, or I shall die. I am not the bad woman you think me. I never had read it—I had not seen it. I think he must have been mad. Once I loved him, but he killed my love himself. I could not have been bad like that. Jenny!—mother!—Arthur! believe me! believe me!"

In this supreme moment of her anguish and shame she forgot all else. She stretched forth her hands, panting.

"Believe me! It is true! Try to understand! Some one is coming! Say one word before it is too late!"

"I understand," he whispered, "and I believe." He made a weak effort to touch her hand, but failed. He thought that perhaps it was the chill and numbness of death which stole over him and held him bound. When the nurse, whose footsteps they had heard, entered, she found him lying with glazed eyes, and Madame Villefort fallen in a swoon at the bedside.

And yet, from this time forward the outside world began to hear that his case was not so hopeless after all.

"Villefort will possibly recover," it was said at first; then, "Villefort improves, it seems;" and, at last, "Villefort is out of danger. Who would have thought it?"

Nobody, however, could say that Madame had kept pace with her husband. When Monsieur was sufficiently strong to travel, and was advised to do so, there were grave doubts as to the propriety of his wife's accompanying him.

But she would not listen to those doubts.

"I will not stay in Paris," she said to her mother. "I want to be free from it, and Jenny has promised to go with us."

They were to go into Normandy, and the day before their departure Ralph Edmondstone came to bid them good-bye.

Of the three he was by far the most haggard figure, and when Bertha came down to meet him in the empty drawing-room, he became a wretched figure with a broken, hopeless air. For a few seconds Bertha did not speak, but stood a pace or two away looking at him. It seemed, in truth, as she waited there in her dark nun-like dress, that nearly all her beauty had left her. There remained only her large sad eyes and pretty hair, and the touching look of extreme youth. In her hand she held the crushed letter.

"See!" she said at last, holding this out to him, "I am not so bad—so bad as that."

He caught it from her hand and tore it into fragments. He was stabbed through and through with shame and remorse. After all, his love had been strong enough here, and his comprehension keen enough to have made him repent in the dust of the earth, in his first calm hour, the insult he had put upon her.

"Forgive me!" he cried; "oh, forgive me!"

The few steps between them might have been a myriad miles.

"I did love you—long ago," she said; "but you never thought of me. You did not understand me then—nor afterward. All this winter my love has been dying a hard death. You tried to keep it alive, but—you did not understand. You only humiliated and tortured me. And I knew that if I had loved you more, you would have loved me less. See!" holding up her thin hand, "I have been worn out in the struggle between my unhappiness and remorse and you."

"You do not know what love is!" he burst forth, stung into swift resentment.

A quick sob broke from her.

"Yes, I do," she answered. "I—I have seen it."

"You mean M. Villefort!" he cried in desperate jealous misery. "You think that he —"

She pointed to the scattered fragments of the letter.

"He had that in his pocket when he fell," she said. "He thought that I had read it. If I had been your wife, and you had thought so, would you have thought that I was worth trying to save—as he tried to save me?"

"What?" he exclaimed, shamefacedly. "Has he seen it?"

"Yes," she answered, with another sob, which might have been an echo of the first. "And that is the worst of all."

There was a pause, during which he looked down at the floor, and even trembled a little.

"I have done you more wrong than I thought," he said.

"Yes," she replied; "a thousand-fold more."

It seemed as if there might have been more to say, but it was not said.

In a little while he roused himself with an effort.

"I am not a villain," he said. "I can do one thing. I can go to Villefort—if you care."

She did not speak. So he moved slowly away until he reached the door. With his hand upon the handle he turned and looked back at her.

"Oh! it is good-bye—good-bye!" he almost groaned.

"Yes."

He could not help it—few men could have done so. His expression was almost fierce as he spoke his next words.

"And you will love him—yes, you will love him."

"No," she answered, with bitter pain. "I am not worthy."

It was a year or more before the Villeforts were seen in Paris again, and Jenny enjoyed her wanderings with them wondrously. In fact, she was the leading member of the party. She took them where she chose,—to queer places, to ugly places, to impossible places, but never from first to last to any place where there were not, or at least had not been, Americans as absurdly erratic as themselves.

The winter before their return they were at Genoa among other places; and it was at Genoa that one morning, on opening a drawer, Bertha came upon an oblong box, the sight of which made her start backward and put her hand to her beating side. M.

Villefort approached her hurriedly. An instant later, however, he started also and shut the drawer.

"Come away," he said, taking her hand gently. "Do not remain here."

But he was pale, too, and his hand was unsteady. He led her to the window and made her sit down.

"Pardon me," he said. "I should not have left them there."

"You did not send them to your friend," she faltered.

"No."

He stood for a moment or so, and looked out of the window at the blue sea which melted into the blue sky, at the blue sky which bent itself into the blue sea, at the white sails flecking the deep azure, at the waves hurrying in to break upon the sand.

"That—" he said at length, tremulously, and with pale lips, "that was false."

"Was false!" she echoed.

"Yes," hoarsely, "it was false. There was no such friend. It was a lie—they were meant only for myself."

She uttered a low cry of anguish and dread.

"Ah, *mon Dieu!*" he said. "You could not know. I understood all, and had been silent. I was nothing—a jest—'*le monsieur de la petite dame*,' as they said,—only that. I swore that I would save you. When I bade you adieu that night, I thought it was my last farewell. There was no accident. Yes—there was one. I did not die, as I had intended. My hand was not steady enough. And since then——"

She rose up, crying out to him as she had done on that terrible night.

"Arthur!" Arthur!"

He came closer to her.

"Is it true," he said,— "is it true that my prayers have never been in vain? Is it true that at last—at last, you have learned—have learned——"

She stretched forth her arms to him.

"It is true!" she cried. "Yes, it is true! —it is true!"

#### WITH THEE.

I'd rather walk through shower with thee,  
Than with another when the air  
Is soft with summer, and as fair  
The heavens above us as a sea  
Of dim, unfathomed sapphire, where,  
Slow drifting on a liquid sky,  
The white-sailed ships of God float by.

Sweeter in storm to be with thee,  
Dark waters 'round us, and the roar  
Of breakers on an unseen shore  
Resounding louder on the lee,—  
Than with another, sailing o'er  
A rippling lake, where angry gale  
May never rend the silken sail.

## TRADITIONAL MUSIC OF THE SPANISH PYRENEES.

THE summer of 1871 saw me in St. Jean de Luz, with my household. Here we came directly into the Basque provinces, of which there are six, and heard a language quite impossible for a stranger to learn. Indeed, the Basquère are so proud of the difficult character of their tongue, that they have a proverb running thus: "The devil lived here seven years and could not learn one word." If his Satanic majesty had had any music in his soul, he would not have tried to learn, for the jargon has no musical sound whatever, and every word ends with something like a sneeze.

St. Jean de Luz is a small, dull fishing village, about six miles from Biarritz, looking out upon the Bay of Biscay, and more sheltered from the cool winds than Biarritz is. There are three parallel streets and five or six cross ones in the town. Nice apartment houses and wretched hovels are crowded together, and the streets are so narrow that if, by chance, a carriage goes by, the foot passengers crowd themselves close against the houses, in imminent danger of being crushed. The principal street, called the Route de Bayonne, leads at one end up to Biarritz and beyond that to Bayonne, as its name indicates, and the

other end leads to the Place Louis XIV., where there is a lovely view of the Bay of Biscay, and a small triangular bit of gravel walk, fenced in, with benches scattered about. The palace of the Infanta, or the Maison Lahobiague as it is sometimes called, stands on the right hand side of the Place, and the Maison Louis XIV. on the left. Oral tradition says that the "Grand Monarque" lived here for a time, when he was betrothed to the Infanta of Spain, she occupying the palace opposite.

There happened to be a great many Spaniards in St. Jean de Luz during the summer of 1871 (attracted probably by the presence of Don Carlos), and guitar-music and pretty little Spanish songs continually filled the air. In Spanish countries there are always many pretty popular airs, of which the music never seems to be printed; and unless one can catch them, by constantly hearing them, it is impossible to procure them. One gets at last to envy the facility with which the "gamins" in the street pick up everything by ear, strum a few notes on the guitar, sing as they go along at the top of their lungs, with all the neighbors joining in. "La Boca de Pepita" was a particularly favorite air, and ran thus:

## LA BOCA DE PEPITA.



La bo - ca de mi Pe - pi - ta, Es mas dul - ce que un pa - nal.

Y sus la - bios son de ro - sa, Pe - ro no son pa - ra mí,

Por - que la ni - ña no me quie - re, No quie - re mi a -

mor, Y los la - bios que son de ro - sa. Ay! no son pa - ra mí.

2.

Los ojos de mi chacha  
Son muy negros y lindos,  
Y los dientes son muy blancos,  
Blancos como la leche.  
Pero la niña no me quiere,  
No quiere mi amor;  
Y los dientes y los ojos  
Ay! no son para mí.

3.

El corazón de mi niña  
Es muy grande y liberal,  
Y su alma es muy pura,  
Pura como una perla.  
Y yo vivo en la esperanza,  
Esperanza y virtud,  
Esperando que la niña  
Quiera mi amor.



## PEPITA'S MOUTH.

Oh, the mouth of my Pepita,  
It is sweeter than the wine;  
And her lips are like the roses,  
But they never can be mine.  
For my darling will not have me,  
My love she doth decline;  
Ah, her lips are like the roses,  
But they never can be mine.

Oh, the eyes of my Pepita  
Are so dazzling and so bright,  
And her teeth have such a luster,  
Milk was never half so white.

But my darling does not like me,  
My love she doth decline,  
And her teeth and her bright eyes  
They never can be mine.

But I know that my Pepita  
Is a tender-hearted girl,  
Very noble is her spirit,  
She is purer than a pearl.  
I am waiting, ever hoping,  
That if faithful I shall prove,  
Ah, at last my dear Pepita  
Will listen to my love.

Here is another very popular street song in old Spain, and the urchins sing it with a peculiarly knowing look, and with a toss of the head quite delicious to see:

## "ME GUSTAN TODAS."

Me gus-tan to - das, me gus - tan to - das, Me gus-tan to - das en ge - ne -  
ral, Pero e - sa ru - bia, pero e - sa ru - bia, Pero e - sa  
ru - bia me gus - ta mas. Chi - quil - lo, no di - gas e - so, Que tu  
ma-dre te va pe - gar, Mi ma-dre ami no me pe - ga, Cuan-do di-go la ver-  
dad. Ta ra la la, ta ra la  
Pero e - sa ru-bia, pero e - sa ru-bia, Pero e - sa ru - bia me gus-ta mas.

## THE GIRL WITH THE GOLDEN HAIR.

I like them all—the pretty girls—  
I like them all, whether dark or fair;  
And yet above the rest I like the best—  
The girl with the golden hair.  
"You foolish boy, don't say so,  
Your mother will punish you!"

"Oh no indeed she will not,  
For saying what is so true;"  
Ta, ra, la, la, etc.  
Ah yes, above the rest I like the best—  
The girl with the golden hair.

Beggars swarmed in St. Jean, and generally thrummed the guitar under the window, singing for a few pennies the most doleful ditties. There was one dreadful creature who came once a week. He used to wear

a long "capa" or cloak, and a wide hat called a "sombrero," and in the most discordantly squeaky voice, which occasionally cracked, he sang this Spanish student's song:

## SPANISH STUDENT'S SONG.

Des-de que soy es-tu-di-an-te, Des-de que lle-vé man-te-  
o No he co-mi-do mas que so-pas, Con sue-lo za-pa-te-  
ro. Es tan-te la ham-bre que ten-go Que aho-ra mis-mo me co-  
mie-ra Los bier-ros de-e-se bal-con, Yel cuer-po de mi mo-re-na.

Behind our apartments, which were in the Rue St. Jacques, was a road leading to the beach and to the Casino. In one of the hovels on this road there lived a poor carpenter who was afflicted with an inebriate wife. She was pleasant enough when sober, but when she was intoxicated she used to chant and shout all kinds of songs, the neighbors generally knowing when she was dangerously cross by her

choice of melodies. When she was very surly she indulged in the following air, which she sang to Basquèze words, which I cannot give; but many is the time that the peaceful inhabitants of the Rue St. Jacques were roused from their sleep by this ditty, until it became as fearful as the cry of the jackal, for we knew when she sang it that poor Jean was having a bad time of it:

## BASQUÈZE AIR.

Song sung by the Carpenter's Wife.

Among our friends in St. Jean were three pretty girls, who created quite a sensation wherever they went, being rather Rubens-like in their proportions, and different from the small delicately made French and Spanish women in the village. The youngest and prettiest was a great favorite, and her name was Emilia. She had numerous admirers; but there was one young Spaniard who was her adoring slave. This poor youth's name was Fernando, and he became a real object of pity to all who knew him, for his abject devotion to the pretty Emilia, who taunted and scorned him.

Fernando, unfortunately, was not brilliant in conversation, but looked unutterable things when Emilia was by. His two broth-

ers, Carlos and Felipe, dubbed him "el dudo," or "the doubtful," because he was never quite sure of anything, and was of a timid nature. If "el dudo" could talk very little, he could sing like a bird, in a most delicious tenor. His admiration of Emilia caused him to compose lovely songs in her honor, and he used to coax Carlos and Felipe to play duet accompaniments on the guitar, while he serenaded her on moonlight nights. The neighborhood rejoiced greatly whenever these serenades took place; but I regret to say that Emilia treated him always with much contumely and silent scorn. The following song was one of the numerous ones which he composed for and sang to her, and it was a great favorite with us all.

## TERESITA MIA.



## 2.

Buenas noches, Teresita mia,  
Dulces sueños te espero;  
Una serenada de mi amor,  
Una canción ti canto.  
Duermete duermete, Teresita mia,  
Luz de mis ojos, luna de mi alma,  
Duermete entiendo la voz de mi pasión.

## TERESITA MIA.

I think of thee, Teresita mia,  
When silver moonlight o'er the hills is streaming,  
Still I see those eyes so brightly beaming,

And the pains of love too well I know.  
Slumber, darling Teresita mia,  
Light of my eyes and bright star of my soul,  
List in thy dreams to the story of my woe!

Good-night, fairest Teresita mia,  
May guardian angels evermore defend thee,  
Sweetest visions in thy sleep attend thee,  
While I sing my serenade to thee.  
Slumber, darling Teresita mia,  
Light of my eyes and bright star of my soul,  
Sleep while I sing this serenade to thee!  
Farewell, then,—ah, fare thee well,  
Teresita!

These young men were stanch supporters of Don Carlos; and among the warm sympathizers in the cause, at St. Jean, was a certain friend of theirs, a Madame C—. Knowing, of course, Fernando's hopeless adoration of Emilia, this good lady called on us and gave us a cordial invitation to attend her receptions. On one evening in the week she received English, and on another her Spanish friends. We were invited to both, but we infinitely preferred the Spanish evenings, because there was less formality and more music and fun. Madame C— was a most curious little person. She was very short and very fat, and had the deepest voice I ever heard in a woman. She was always gorgeously attired when she made visits, and felt hurt if every one was not in full dress at her parties; but she herself received in a blue mousseline delaine dress, with white spots, her white hair all drawn back and fastened into a tight knot at the back of her head by a comb. This good little creature lived in the Maison Louis XIV., of which she was the proprietress. She boasted always of being connected with the "Grand Monarque," although she was very vague and misty as to details. However, she so evidently believed in

the relationship herself that every one received the shadowy tale with apparent faith.

Her house was really a curiosity. A copy of a well-known picture of Louis XIV. hung in her drawing-room. The most exquisite old lace formed valances for her mantel-pieces; and we ate and drank from china and glass of most curious design, all marked with L. XIV. and the crown.

I shall never forget one of the many evenings we passed at her house. It was a gala night among the Carlists,—for Don Carlos was there. In repose his face was melancholy and sad; but it lighted up wonderfully in conversation. His spirits were cheerful, and he was immensely popular with his supporters. The evening was very hot, and the balcony at Madame C—'s being very wide, we all went out there to sit and get cool. Looking over the high road, we could see the lovely "Corona de España," the highest peak in the Spanish Pyrenees, bathed in moonlight and romance. Emilia was there, and Fernando, delighted to pour out his soul to her in music, coaxed his brothers to play, while he sang the following song:

## "A STA LA MAÑANA."

A sta la ma - ña - na, Ni ña mi - a, A sta la ma - ña - na,  
 bai - lar con ti Tu es mi pa - ja - ri - to, ri - to - ri - to,  
 Tu es mi pa - ja - ri - to, Mi co - ra - zon. Ven dan - zar ni - ña  
 en tu man - til - la, Ac - cor - da te de nues - tro a - mor y bai - la - re - mos  
 ni - ña. Que - ri - da mi - a, bai - la - re - mos ni - ña, el bo - le - ro.

## 2.

Deme esa rosa de tu mantilla,  
 Deme esa rosa que portas tu,  
 Y dime que tu m'amas, Pepita mia,  
 Y dime que tu m'amas del corazon.  
 Ven danzar, niña, en tu mantilla,  
 Accordate de nuestro amor;  
 Tu es mi pajarito, flor de mi vida,  
 Sol de mi alma, mi corazon.

## TO-MORROW.

I await the morrow, Niña mia,  
 I await the morrow all thro' the night,

For the entrancing music and dancing  
 With thee, my song bird, my heart's delight.  
 Come dance, my Niña, in thy mantilla,  
 Think of our love, and do not say no,  
 Hasten then, my treasure, grant me this pleasure,  
 Dance, then, to-morrow the Bolero.

Give me the rosebud in thy mantilla,  
 Give me the rosebud that thou dost wear,  
 And tell me that thou lovest me, Pepita mia,  
 I will be faithful as thou art fair.  
 Come, dance to-morrow in thy mantilla,  
 Ever my fairest treasure thou art,  
 Join then the entrancing music and dancing  
 With me, my flower, pride of my heart.

## "JOTA ARAGONESA."

On Sundays there was dancing on the beach, by the fishwomen and peasants, to the music of two fiddles and a flute. The "Jota Aragonesa," given above, was always a favorite dance.

Our summer passed away very quickly and pleasantly. We made excursions into Spain; saw bull-fights; basked in the delightful sunshine and laughter of the place; and we shall always retain a warm

corner in our hearts for quiet, dull St. Jean de Luz.\*

\* Those who are interested in these songs are referred to a paper by the same author in SCRIBNER for February, 1877, entitled "Traditional Music of the French Pyrenees." Some of the songs quoted in these two papers have been arranged with accompaniment for the piano, by Miss Sturgis and Mr. William P. Blake, and have been published by Mr. Carl Prüfer, of Boston.—ED.

## HOW IT WAS DONE IN GREAT BRITAIN.

Now that renewed attention is being directed to the evils that infest the civil service of this country and the best methods of correcting them, it is opportune to examine the means by which Great Britain has endeavored to purify and improve her civil service. Reform in the British civil service is a much newer thing than is generally supposed. It was not till 1853 that any systematic effort was made toward an improvement in the methods of selecting the civil servants of Great Britain. In that year Sir Stafford Northcote and Charles E. Trevelyan were appointed a committee to inquire into the organization of the permanent civil service, and to report the results of their inquiries to the lords of the treasury. Their report of November 23, 1853, may be said to be the foundation of the whole system of civil service examinations in Great Britain. They recounted the evils flowing from the old system of appointment in strong but temperate language. They declared that the civil service of the country did not attract the best men; that it was sought by the indolent, the unambitious, and the incapable, and that the junior clerkships were likely to be bestowed upon the sons or dependents of those having personal or political claims on the head of the department. As a remedy for these evils they recommended open, competing literary examinations, conducted by a single central board, for all appointments to junior situations in the public service, and the appointment of all persons on probation. Prior to that time examinations had been applied to the nominees for appointment in many branches of the service, but they were not uniform, and in most cases they were not effective. In the inland revenue service examinations had been introduced as far back as 1848, and they had also been in force in the customs service for some years. In some offices the examinations may have been a real test of fitness, but in many cases they were merely formal. Edward Romilly, secretary of the Board of Trade, said that he had been a member of a board of examiners for twelve years, and that not one candidate had been rejected by the board. These examinations were in no case competitive, but were simply "pass," or test examinations of candidates nominated in the usual way.

In one important respect the evils to be

dealt with in Great Britain differed from those from which the civil service of this country suffers. Here, one of the chief evils is the uncertainty of tenure, the liability of the civil servants to summary and insulting dismissal, whenever their influence weakens or their political fidelity is suspected, and the certainty of a sweeping change of the public employes, from highest to lowest, upon a change in the political complexion of the administration. There, the tenure of the rank and file of the service was secure. Only the political heads of departments changed with the administration. Except in cases of personal culpability, the only way of getting rid of an incompetent or indolent clerk was by pensioning. After a man was once appointed, the public had him for life. The evils sprang almost wholly from the defective methods of selecting the public servants in the first instance. Sir James Stephen, who was for thirty-five years connected with the colonial department, said that the majority of persons appointed in that department possessed an incredibly low degree of requisite qualities, and that the same was true of other departments; that nepotism was prevalent in the public service, and that the places were usually given to friends or dependents of the appointing power. Another officer said that of eighty clerks supplied by patronage, not more than twelve were worth their salt. A retired civil officer declared that some of the clerks assigned to his office were unable to read or write, that one could not number beyond ten, and that in some instances upon a new appointee's presenting himself he was at once given a month's leave of absence, in order that he might learn to write!

The course pursued with Northcote and Trevelyan's report is a good illustration of the thorough, systematic manner in which the British consider public questions. Copies of the report, accompanied by a plan of competition, drawn up by the Rev. B. Jowett of Baliol College, were sent to a large number of eminent gentlemen,—including professors of universities, heads of colleges, men distinguished for their learning, chiefs of departments and other high officers, as well as some who had retired after long and distinguished service,—with a request for an expression of their judgment upon the plan



proposed. The opinions furnished in response to this request were most of them very full and elaborate, and make in all a stout octavo volume of 438 pages. Their general tone was highly favorable to the proposed system of competitive examinations. The most unfavorable comments were made by a few department officials who had grown up under the old system, and who took umbrage at some of the expressions in the report derogatory to the character of the service.

No direct action was taken by the government upon the report of the committee of inquiry. The royal speech of 1854 called attention to the subject, and stated that Her Majesty would direct a plan to be laid before Parliament to improve the system of admission and increase the efficiency of the service. Owing to a change of ministry the promised plan was not presented, but on May 21, 1855, was issued the famous order in council relative to the examination of candidates for admission to the civil service. The order appointed a civil service commission of three members, and directed that all young men who were proposed for appointment to any junior situation in any department should be examined by or under the direction of the commission before being admitted to probation. The commission was required to ascertain with respect to each candidate that he was within the limits of age prescribed, that he was free from any physical defect or disease likely to interfere with the discharge of his duties, that his character was such as to qualify him for the public employment, and that he possessed the requisite knowledge and ability. The rules of examination were to be settled at the discretion of the heads of departments, and the commission was prohibited from making any alteration in respect to the nomination or appointment of candidates. Successful candidates were required to be appointed for a probationary term of six months. If, by the expiration of that time, proofs of their conduct and capacity had been presented to the chief of the department, they were to be re-appointed.

It will be seen that this plan fell very far short of the scheme of unrestricted competition recommended by the committee of inquiry. Patronage was still permitted to have full sway in the nomination of the candidates. Appointments might still be made for political and personal reasons as freely as before. The only condition imposed was that the nominee should obtain a cer-

tificate of qualification from the civil service commission. Nevertheless, it was a great improvement on the previous order of things, and in time became the stepping-stone to a still better system. The most salutary feature was the establishment of a board of experienced and capable men, independent of the appointing power. By this means a fair and uniform system of examination was secured. The original commission consisted of Sir Edward Ryan, assistant comptroller-general of the exchequer, John George Shaw Lefevre, clerk-assistant to the House of Lords, and Edward Romilly, then chairman of the board of audit. Mr. Romilly, however, never acted as a member of the commission.

The commission immediately entered upon the performance of its duties. In June, 1855, a circular was addressed to the heads of departments, preliminary to settling the regulations governing the examinations for their departments, and on the 30th of that month was held the first examination under the order in council. The first report of the commission, dated March 4, 1856, showed that, to the close of February, 1,078 candidates had been examined, and that certificates of qualification had been granted to 676 of them. The range of examination varied widely for different positions and different branches of the service. Although neither the order in council, nor the regulations under it, required the nomination of more than one candidate for each vacancy, several of the offices voluntarily adopted the plan of limited competition. Three or more candidates were nominated for each vacancy, and were subjected to the same examination, the one standing highest receiving the appointment. Seven such competitive examinations had been held when the report was submitted, in which 175 candidates competed for 58 situations. This practice met with considerable favor, and was somewhat extended during subsequent years, although most of the examinations were pass examinations of a single nominee. To February 25, 1858, 127 examinations had been held, in which limited competition was applied. Thirty of these were held in 1856, 68 in 1857, and 29 in the first two months of 1858. The commissioners stated in their report for 1858 that they had carefully compared the results of the pass examinations with those of the competitive examinations, and that the best of the candidates in the latter were better than the best of those in the former. As the result of their experience, they reported that com-

petition was the best method of securing junior clerks.

The House of Commons had already twice approved the competitive principle, and declared that it ought to be extended (first, by the resolution of April 24, 1856, and again, by the resolution of July 14, 1857), basing its opinion on the results of the examinations conducted by the civil service commission. Its action in this respect was in strong contrast to the indifference manifested by our own Congress toward a similar experiment in this country. Notwithstanding the approval of the House of Commons and the recommendation of the commission, no measures were taken by the government at that time to extend the application of the competitive principle.

In the year 1858 the plan of limited competition was still further extended, the practice being adopted in some departments of nominating more than three candidates for one vacancy, instead of only three as formerly. On January 18, 1859, occurred the first open unrestricted competitive examination ever held in England for clerkships in a public office. The vacancies to be filled were in eight writerships in the office of the secretary of state for India. Three hundred and ninety-one competitors were summoned and three hundred and thirty-nine appeared. The subjects of the examination were not very formidable. They consisted of handwriting, copying from manuscript, orthography, arithmetic, including decimal and vulgar fractions, English composition, geography and history.

In 1860 an important change was proposed in the plan of examination. In that year a committee was appointed by the House of Commons to inquire into the mode of nominating and examining candidates. In their report of July 9, the competitive principle was very strongly approved, and the system of private patronage condemned. They did not, however, recommend the immediate adoption of the plan of open competition, believing that precipitancy in adopting it might lead to reaction. They thought that the general substitution of a system of limited but real competition for that of simple nomination would be an important step in advance, and recommended that each vacancy be competed for by at least three candidates, "to be nominated, as at present," except when there was but one vacancy, in which case there should be at least five competitors. They also recommended that each candidate,

before being admitted to the competition, should pass a preliminary test, or pass examination in order that the competition might be real and not illusory. They also recommended that several vacancies should be competed for at one time and that the commissioners should examine into the moral and physical qualifications of candidates before, instead of after, examination. The report met with the approval of Lord Palmerston, and steps were at once taken to carry its recommendations into effect. There were still many offices which had not adopted the practice of limited competition recommended by the committee. The establishment of the preliminary pass examinations made an important change in the mode of procedure. They were introduced early in 1861 into the offices for which the treasury had the right of nomination, but were not extended to all of the other branches of the service until some time after. In 1860 limited competition was applied in 33.2 per cent. of the examinations. In 1861 the percentage increased to 53.8, but fell back to 42.2 in the next year, showing that the progress was by no means uniform. The names of the successful candidates in the pass examinations were entered on the qualified lists, from which all competitors for vacancies were chosen. All names not nominated were canceled on a change of ministry.

This system continued in operation without material change until 1870. The nomination of candidates for examination was still a matter of patronage and influence. Interest with public officers and members of Parliament was indispensable to the seeker after a nomination. In their report for 1868 the commission gave a history of the progress of the competitive principle, and strongly advocated the adoption of the practice of open competition. They declared that, in most cases of limited competition, the candidates selected by the nominating departments were so few as to render the competition illusory. In 1870 the most important step yet made in the direction of reform was taken. On June 4 of that year an order in council was issued, directing that, with certain exceptions, all appointments either permanent or temporary to any situation or employment in any department of the civil service made after August 31 of that year should be made by means of open competitive examinations. The exceptions are: offices in the gift of the crown, places filled in the ordinary course of promotion by persons already serving in the de-

partments, and such situations as the heads of the departments, with the concurrence of the lords of the treasury, may designate. The civil service commission was also authorized to dispense with examinations where professional or peculiar qualifications are required. The practice of preliminary pass examinations was not disturbed. The order was at once put in operation, and the system which it provides is that under which admission is now gained to the great mass of positions in the civil service of Great Britain, whether situated in England, Ireland or Scotland.

The situations are divided into two general classes,—Class I. embracing those positions for which a high order of educational attainments is required, and Class II. those which may be filled by younger and less educated men. Each class is divided into several grades. Admission can be gained only at the lowest grade of a class. The upper class is much the smaller of the two, and examinations for admission to it are very infrequent. The annual salaries on entrance into it run from about £200 to £250, and its members are eligible for advancement to the highest places. The salaries of the lower class advance from £80 or £100 in the lowest grades to £300 in the highest. Members of the lower class cannot enter the upper except through open competition with all comers. General examinations are held for admission to each class, besides special examinations for special positions. Examinations for local offices are conducted at the place of location under the direction and control of the civil service commission, to whom all the papers are sent for revision.

The subjects of the preliminary pass examinations are handwriting, orthography, arithmetic (to vulgar and decimal fractions), and, for Class I. only, English composition. The subjects of the competitive examinations for situations in Class I. are English composition and *précis*, language, literature and history of England, Greece, Rome, France, Germany and Italy, mathematics, pure and mixed, natural science, moral science, jurisprudence and political economy. For Class II. the candidates are examined in handwriting, orthography, arithmetic, copying manuscript, indexing and digesting returns, English composition, geography, English history and book-keeping. Other subjects are added for special situations requiring peculiar attainments. The following will serve as examples of the subjects on which candidates for

such places are examined: law of evidence, constitutional and international law, criminal law, mercantile and commercial law, religious knowledge, school management and correction of the press. In pass examinations no marks are assigned, but the character of the answers is indicated by epithets which determine the result with sufficient accuracy. In competitive examinations, a certain number of marks indicates the maximum in each subject, and constitutes the scale on which the candidate's answers are marked. Thus, if the total of marks is 2,000 and it is desired to give a certain subject a weight of one-fifth in the examination, 400 marks are assigned to it and the candidate's proficiency in it is marked on a scale of 400. In this country the examining boards adopted the much simpler plan of marking each answer on a scale of 100, and of affixing the proper weight to each subject afterward by multiplying the average of the marks obtained in it by a number indicating its relative importance.

Under the commission are two permanent examiners, who have general control of the examinations, framing the questions and, in most cases, marking the answers. Occasional examiners of high qualifications in special and technical subjects are also employed. Short-hand, book-keeping, book and vellum binding, free-hand drawing and political economy are specimens of the subjects in which there are special examiners. The duties of the commission are by no means confined to ascertaining the literary acquirements of candidates. A searching inquiry is also made into their health and moral character, and many candidates are rejected because they are not able to furnish satisfactory evidence on these points. Many are also rejected because it is found on investigation that they do not come within the prescribed limits of age. Before the appointment of the commission it was common for men broken down in health or character to be foisted on the public service, just as they are now often forced into the civil service of this country—by political "influence."

In addition to the regular clerical force, temporary writers are employed by some departments. These have no fixed tenure of office, but are employed as occasion requires. Formerly, they were employed at the discretion of the heads of departments, without any regular testing of their qualifications. Under the present regulations, which were confirmed by the order in council of

August 19, 1871, these writers are subjected to a simple pass examination, and if they are found qualified their names are entered upon a register kept at the office of the civil service commission. When temporary writers are required by any department, they must be selected from the names thus registered. The subjects of the examinations are: handwriting, spelling, copying manuscript, and copying figures and tabular statements. The names of temporary messengers are registered in the same manner, on the presentation of satisfactory evidence of health and moral character, and of their ability to read and write. In February, 1876, there was constituted a new division of the service lower than the two classes already mentioned. It consists of men and boy clerks, who are examined in much the same way as the writers.

The total number of cases acted upon by the commission to December 31, 1874, was 142,423, classified as follows:

CANDIDATES.	From May 21, 1855 to June 30, 1870	From July 1, 1870 to Dec. 31, 1874	Total.
Nominated singly.....	53,280	15,109	68,389
Nominated to compete...	8,304	3,983	12,287
Ent'd for open competition	10,387	41,264	51,651
Entered for registration as writers and messengers.	....	10,096	10,096
	71,971	70,452	142,423

It will be observed that the number of candidates examined in the four and one-half years following the adoption of open competition was nearly equal to the number examined in the entire fifteen years preceding. The number of candidates certified as qualified was 54,385. 16,075 candidates were examined under other authority than that of the orders in council.

The appointments to the civil service in the first instance are usually to junior situations. After the six months' probation has been satisfactorily passed the candidate receives a permanent appointment. In most offices the officers and clerks receive an annual increment of salary until they reach the maximum of their class. Arrived at this point, there is no further advancement until a vacancy occurs in the next grade above. Promotions within the class are made from grade to grade without examination by what has been termed a mixed system of seniority and merit. They are necessarily very slow on account of the permanency of tenure and of the rare occurrence of vacancies.

The competitive system was applied to the East India civil service at a much earlier day than to that of the mother country. An act of Parliament, passed in 1854, provided for examinations for admission to the civil service of the East India Company. A committee, of which Lord Macaulay was chairman, submitted a plan on which the examinations should be conducted. The scheme provided for a competitive examination of a very severe and extended character for admission to Haileybury College—an institution for the education of persons for the East India civil service—and for a pass examination after an interval of from one to two years of the successful candidates in the competitive examinations. Haileybury College was abolished in 1855 on the recommendation of the India Board and the successful candidates were allowed to study where they chose, but the general features of Lord Macaulay's plan were carried out, and are still in force. The examinations are open to all natural-born subjects of Great Britain, presenting the requisite evidence of age, health and character. The competitive examination is of a general nature and embraces, among other subjects, ancient and modern languages, literature and history, mathematics, pure and mixed, natural science, moral science and the Sanskrit and Arabic languages and literature. The number of selected candidates has varied from 20 to 80 according to the needs of the service. The subsequent pass examinations are devoted more particularly to the history and geography of India, Sanskrit, the vernacular languages of India, law, and political economy,—to the study of which the selected candidates are expected to devote themselves during the interval between the two examinations. Those who are found qualified, are entitled to be appointed in the East India civil service. The first competitive examination was held in July, 1855, and others followed in 1856 and 1857. These were held under the direction of the India Board, with the assistance of the civil service commission,—the commission relieving the board from trouble but not from responsibility. In 1858 an act was passed making it the duty of the civil service commissioners to conduct the examinations for the East India civil service, and recognizing and defining the duties of the commission. From that time to this the examinations have been conducted by the commissioners with the most satisfactory results. The East India civil service is of the highest intelli-

gence, character, and ability, and it owes these qualities to the application of the competitive system of selection in its broadest and highest form. Many of the men who have thus gained admission to the service have won their way with surprising rapidity to the foremost positions in it. The apprehension that they would prove to be sickly bookworms has been dissipated.

The competitive system now applies to almost the entire civil service of Great Britain. The chief exceptions are the foreign office and the diplomatic service. These constitute the only prominent strongholds of the ancient system of patronage and favoritism which the reformers have not been able to carry. Within the last few months an assault has been made upon them in the House of Commons under the leadership of Mr. George O. Trevelyan. It was opposed by the same arguments that were used by the advocates of exclusion and favoritism against the original introduction of the competitive principle. The attack was not successful in this instance,

but in the light of past experience it cannot be doubted that those branches of the service will soon be compelled to yield to the same reforming influences which have prevailed in all the other departments of the government.

Canada in 1858 threw the appointments in her civil service open to competition, and South Australia adopted the same policy in 1874. New Zealand, also, in 1866 required all candidates for the civil service to pass a junior examination before becoming eligible for appointment, and to pass a senior examination before advancement to any class above the fourth.

The steady and triumphant progress of the competitive principle in Great Britain against class interests, prejudice and prescriptive customs which had acquired almost the force of law, is full of encouragement for the friends of reform in this country. Republican America ought not to lag far behind monarchical England in the application of a reform, the principles of which are essentially just and democratic.

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### CHILD'S-FAITH.

ALL beautiful tales, I trust, are true.

But here is a grave in the moss,  
And there is the sky. And the buds are blue,  
And a butterfly blows across.

Yes, here is the grave and there is the sky:  
To the one or the other we go.  
And between them wavers the butterfly,  
Like a soul that does not know.

Somewhere? Nowhere? Too-golden head,  
And lips that I miss and miss,  
You would tell me the secret of the dead—  
Could I find you with a kiss!

\*\*\* Come here, I say, little child of mine,  
Come with your bloom and your breath.  
(If he should believe in the life divine,  
I will not believe in death!)

"Where is your brother?"—I question low,  
And wait for his wise reply.  
Does he say—"Down there in the grave"? Ah, no;  
He says, with a laugh, "In the sky!"



## CALVIN: A STUDY OF CHARACTER.

BY THE AUTHOR OF "MY SUMMER IN A GARDEN."

CALVIN is dead. His life, long to him, but short for the rest of us, was not marked by startling adventures, but his character was so uncommon and his qualities were so worthy of imitation, that I have been asked by those who personally knew him to set down my recollections of his career.

His origin and ancestry were shrouded in mystery; even his age was a matter of pure conjecture. Although he was of the Maltese race, I have reason to suppose that he was American by birth as he certainly was in sympathy. Calvin was given to me eight years ago by Mrs. Stowe, but she knew nothing of his age or origin. He walked into her house one day out of the great unknown and became at once at home, as if he had been always a friend of the family. He appeared to have artistic and literary tastes, and it was as if he had inquired at the door, if that was the residence of the author of "Uncle Tom's Cabin," and, upon being assured that it was, had decided to dwell there. This is, of course, fanciful, for his antecedents were wholly unknown, but in his time he could hardly have been in any household where he would not have heard "Uncle Tom's Cabin" talked about. When he came to Mrs. Stowe, he was as large as he ever was, and apparently as old as he ever became. Yet there was in him no appearance of age; he was in the happy maturity of all his powers, and you would rather have said that in that maturity he had found the secret of perpetual youth. And it was as difficult to believe that he would ever be aged as it was to imagine that he had ever been in immature youth. There was in him a mysterious perpetuity.

After some years, when Mrs. Stowe made her winter home in Florida, Calvin came to live with us. From the first moment, he fell into the ways of the house and assumed a recognized position in the family,—I say recognized, because after he became known he was always inquired for by visitors, and in the letters to the other members of the family he always received a message. Although the least obtrusive of beings, his individuality always made itself felt.

His personal appearance had much to do with this, for he was of royal mold, and had an air of high breeding. He was large, but he had nothing of the fat grossness of

the celebrated Angora family; though powerful, he was exquisitely proportioned, and as graceful in every movement as a young leopard. When he stood up to open a door—he opened all the doors with old-fashioned latches—he was portentously tall, and when stretched on the rug before the fire he seemed too long for this world—as indeed he was. His coat was the finest and softest I have ever seen, a shade of quiet Maltese; and from his throat downward, underneath, to the white tips of his feet, he wore the whitest and most delicate ermine; and no person was ever more fastidiously neat. In his finely formed head you saw something of his aristocratic character; the ears were small and cleanly cut, there was a tinge of pink in the nostrils, his face was handsome and the expression of his countenance exceedingly intelligent—I should call it even a sweet expression if the term were not inconsistent with his look of alertness and sagacity.

It is difficult to convey a just idea of his gayety in connection with his dignity and gravity, which his name expressed. As we know nothing of his family, of course it will be understood that Calvin was his Christian name. He had times of relaxation into utter playfulness, delighting in a ball of yarn, catching sportively at stray ribbons when his mistress was at her toilet, and pursuing his own tail, with hilarity, for lack of anything better. He could amuse himself by the hour, and he did not care for children; perhaps something in his past was present to his memory. He had absolutely no bad habits, and his disposition was perfect. I never saw him exactly angry, though I have seen his tail grow to an enormous size when a strange cat appeared upon his lawn. He disliked cats, evidently regarding them as feline and treacherous, and he had no association with them. Occasionally there would be heard a night concert in the shrubbery. Calvin would ask to have the door opened, and then you would hear a rush and a "pestzt," and the concert would explode, and Calvin would quietly come in and resume his seat on the hearth. There was no trace of anger in his manner, but he wouldn't have any of that about the house. He had the rare virtue of magnanimity. Although he had

fixed notions about his own rights, and extraordinary persistency in getting them, he never showed temper at a repulse; he simply and firmly persisted till he had what he wanted. His diet was one point; his idea was that of the scholars about dictionaries,—to “get the best.” He knew as well as any one what was in the house, and would refuse beef if turkey was to be had; and if there were oysters, he would wait over the turkey to see if the oysters would not be forthcoming. And yet he was not a gross gourmand; he would eat bread if he saw me eating it, and thought he was not being imposed on. His habits of feeding, also, were refined; he never used a knife, and he would put up his hand and draw the fork down to his mouth as gracefully as a grown person. Unless necessity compelled, he would not eat in the kitchen, but insisted upon his meals in the dining-room, and would wait patiently, unless a stranger were present; and then he was sure to importune the visitor, hoping that the latter was ignorant of the rule of the house, and would give him something. They used to say that he preferred as his table-cloth on the floor a certain well-known church journal; but this was said by an Episcopalian. So far as I know, he had no religious prejudices, except that he did not like the association with Romanists. He tolerated the servants, because they belonged to the house, and would sometimes linger by the kitchen stove; but the moment visitors came in he arose, opened the door, and marched into the drawing-room. Yet he enjoyed the company of his equals, and never withdrew, no matter how many callers—whom he recognized as of his society,—might come into the drawing-room. Calvin was fond of company, but he wanted to choose it; and I have no doubt that his was an aristocratic fastidiousness, rather than one of faith. It is so with most people.

The intelligence of Calvin was something phenomenal, in his rank of life. He established a method of communicating his wants, and even some of his sentiments; and he could help himself in many things. There was a furnace register in a retired room, where he used to go when he wished to be alone, that he always opened when he desired more heat; but never shut it, any more than he shut the door after himself. He could do almost everything but speak; and you would declare sometimes that you could see a pathetic longing to do that in his intelligent face. I have no desire to

overdraw his qualities, but if there was one thing in him more noticeable than another, it was his fondness for nature. He could content himself for hours at a low window, looking into the ravine and at the great trees, noting the smallest stir there; he delighted, above all things, to accompany me walking about the garden, hearing the birds, getting the smell of the fresh earth, and rejoicing in the sunshine. He followed me and gamboled like a dog, rolling over on the turf and exhibiting his delight in a hundred ways. If I worked, he sat and watched me, or looked off over the bank, and kept his ear open to the twitter in the cherry-trees. When it stormed, he was sure to sit at the window, keenly watching the rain or the snow, glancing up and down at its falling; and a winter tempest always delighted him. I think he was genuinely fond of birds, but, so far as I know, he usually confined himself to one a day; he never killed, as some sportsmen do, for the sake of killing, but only as civilized people do,—from necessity. He was intimate with the flying-squirrels who dwell in the chestnut-trees,—too intimate, for almost every day in the summer he would bring in one, until he nearly discouraged them. He was, indeed, a superb hunter, and would have been a devastating one, if his bump of destructiveness had not been offset by a bump of moderation. There was very little of the brutality of the lower animals about him; I don't think he enjoyed rats for themselves, but he knew his business, and for the first few months of his residence with us he waged an awful campaign against the horde, and after that his simple presence was sufficient to deter them from coming on the premises. Mice amused him, but he usually considered them too small game to be taken seriously; I have seen him play for an hour with a mouse, and then let him go with a royal condescension. In this whole matter of “getting a living,” Calvin was a great contrast to the rapacity of the age in which he lived.

I hesitate a little to speak of his capacity for friendship and the affectionateness of his nature, for I know from his own reserve that he would not care to have it much talked about. We understood each other perfectly, but we never made any fuss about it; when I spoke his name and snapped my fingers, he came to me; when I returned home at night, he was pretty sure to be waiting for me near the gate, and would rise and saunter along the walk, as if

his being there were purely accidental,—so shy was he commonly of showing feeling; and when I opened the door he never rushed in, like a cat, but loitered, and lounged, as if he had had no intention of going in, but would condescend to. And yet, the fact was, he knew dinner was ready, and he was bound to be there. He kept the run of dinner-time. It happened sometimes, during our absence in the summer, that dinner would be early, and Calvin, walking about the grounds, missed it and came in late. But he never made a mistake the second day. There was one thing he never did,—he never rushed through an open door-way. He never forgot his dignity. If he had asked to have the door opened, and was eager to go out, he always went deliberately; I can see him now, standing on the sill, looking about at the sky as if he was thinking whether it were worth while to take an umbrella, until he was near having his tail shut in.

His friendship was rather constant than demonstrative. When we returned from an absence of nearly two years, Calvin welcomed us with evident pleasure, but showed his satisfaction rather by tranquil happiness than by fuming about. He had the faculty of making us glad to get home. It was his constancy that was so attractive. He liked companionship, but he wouldn't be petted, or fussed over, or sit in any one's lap a moment; he always extricated himself from such familiarity with dignity and with no show of temper. If there was any petting to be done, however, he chose to do it. Often he would sit looking at me, and then, moved by a delicate affection, come and pull at my coat and sleeve until he could touch my face with his nose, and then go away contented. He had a habit of coming to my study in the morning, sitting quietly by my side or on the table for hours, watching the pen run over the paper, occasionally swinging his tail round for a blotter, and then going to sleep among the papers by the inkstand. Or, more rarely, he would watch the writing from a perch on my shoulder. Writing always interested him, and, until he understood it, he wanted to hold the pen.

He always held himself in a kind of reserve with his friend, as if he had said, "Let us respect our personality, and not make a 'mess' of friendship." He saw, with Emerson, the risk of degrading it to trivial convenience. "Why insist on rash personal relations with your friend?" "Leave this touching and clawing." Yet I would not

give an unfair notion of his aloofness, his fine sense of the sacredness of the me and the not-me. And, at the risk of not being believed, I will relate an incident, which was often repeated. Calvin had the practice of passing a portion of the night in the contemplation of its beauties, and would come into our chamber over the roof of the conservatory through the open window, summer and winter, and go to sleep on the foot of my bed. He would do this always exactly in this way; he never was content to stay in the chamber if we compelled him to go upstairs and through the door. He had the obstinacy of General Grant. But this is by the way. In the morning, he performed his toilet and went down to breakfast with the rest of the family. Now, when the mistress was absent from home, and at no other time, Calvin would come in the morning, when the bell rang, to the head of the bed, put up his feet and look into my face, follow me about when I rose, "assist" at the dressing, and in many purring ways show his fondness, as if he had plainly said, "I know that she has gone away, but I am here." Such was Calvin in rare moments.

He had his limitations. Whatever passion he had for nature, he had no conception of art. There was sent to him once a fine and very expressive cat's head in bronze, by Frémiet. I placed it on the floor. He regarded it intently, approached it cautiously and crouchingly, touched it with his nose, perceived the fraud, turned away abruptly, and never would notice it afterward. On the whole, his life was not only a successful one, but a happy one. He never had but one fear, so far as I know: he had a mortal and a reasonable terror of plumbers. He would never stay in the house when they were here. No coaxing could quiet him. Of course he didn't share our fear about their charges, but he must have had some dreadful experience with them in that portion of his life which is unknown to us. A plumber was to him the devil, and I have no doubt that, in his scheme, plumbers were foreordained to do him mischief.

In speaking of his worth, it has never occurred to me to estimate Calvin by the worldly standard. I know that it is customary now, when any one dies, to ask how much he was worth, and that no obituary in the newspapers is considered complete without such an estimate. The plumbers in our house were one day overheard to say that, "They say that *she* says that *he* says that he wouldn't take a hundred dollars for him."

It is unnecessary to say that I never made such a remark, and that, so far as Calvin was concerned, there was no purchase in money.

As I look back upon it, Calvin's life seems to me a fortunate one, for it was natural and unforced. He ate when he was hungry, slept when he was sleepy, and enjoyed existence to the very tips of his toes and the end of his expressive and slow-moving tail. He delighted to roam about the garden, and stroll among the trees, and to lie on the green grass and luxuriate in all the sweet influences of summer. You could never accuse him of idleness, and yet he knew the secret of repose. The poet who wrote so prettily of him that his little life was rounded with a sleep, understated his felicity; it was rounded with a good many. His conscience never seemed to interfere with his slumbers. In fact, he had good habits and a contented mind. I can see him now walk in at the study door, sit down by my chair, bring his tail artistically about his feet, and look up at me with unspeakable happiness in his handsome face. I often thought that he felt the dumb limitation which denied him the power of language. But since he was denied speech, he scorned the inarticulate mouthings of the lower animals. The vulgar mewing and yowling of the cat species was beneath him; he sometimes uttered a sort of articulate and well-bred ejaculation, when he wished to call attention to something that he considered remarkable, or to some want of his, but he never went whining about. He would sit for hours at a closed window, when he desired to enter, without a murmur, and when it was opened he never admitted that he had been impatient by "bolting" in. Though speech he had not, and the unpleasant kind of utterance given to his race he would not use, he had a mighty power of purr to express his measureless content with congenial society. There was in him a musical organ with stops of varied power and expression, upon which I have no doubt he could have performed Sebastian Bach's celebrated cat's-fugue.

Whether Calvin died of old age, or was carried off by one of the diseases incident to youth, it is impossible to say; for his departure was as quiet as his advent was mysterious. I only know that he appeared to us in this world in his perfect stature and beauty, and that after a time, like Lohengrin, he withdrew. In his illness, there was nothing more to be regretted than in all his blameless life. I suppose there never was an illness that had more of dignity, and

sweetness, and resignation in it. It came on gradually, in a kind of listlessness and want of appetite. An alarming symptom was his preference for the warmth of a furnace-register to the lively sparkle of the open wood-fire. Whatever pain he suffered, he bore it in silence, and seemed only anxious not to obtrude his malady. We tempted him with the delicacies of the season, but it soon became impossible for him to eat, and for two weeks he ate or drank scarcely anything. Sometimes he made an effort to take something, but it was evident that he made the effort to please us. The neighbors—and I am convinced that the advice of neighbors is never good for anything—suggested catnip. He wouldn't even smell it. We had the attendance of an amateur practitioner of medicine, whose real office was the cure of souls, but nothing touched his case. He took what was offered, but it was with the air of one to whom the time for pellets was passed. He sat or lay day after day almost motionless, never once making a display of those vulgar convulsions or contortions of pain which are so disagreeable to society. His favorite place was on the brightest spot of a Smyrna rug by the conservatory, where the sunlight fell and he could hear the fountain play. If we went to him and exhibited our interest in his condition, he always purred in recognition of our sympathy. And when I spoke his name, he looked up with an expression that said, "I understand it, old fellow, but it's no use." He was to all who came to visit him a model of calmness and patience in affliction.

I was absent from home at the last, but heard by daily postal-card of his failing condition; and never again saw him alive. One sunny morning, he rose from his rug, went into the conservatory (he was very thin then), walked around it deliberately, looking at all the plants he knew, and then went to the bay-window in the dining-room, and stood a long time looking out upon the little field, now brown and sere, and toward the garden, where perhaps the happiest hours of his life had been spent. It was a last look. He turned and walked away, laid himself down upon the bright spot in the rug, and quietly died.

It is not too much to say that a little shock went through the neighborhood when it was known that Calvin was dead, so marked was his individuality; and his friends, one after another, came in to see him. There was no sentimental nonsense about his obsequies; it was felt that any parade would

have been distasteful to him. John, who acted as undertaker, prepared a candle-box for him, and I believe assumed a professional decorum; but there may have been the usual levity underneath, for I heard that he remarked in the kitchen that it was the "driest wake he ever attended." Everybody, however, felt a fondness for Calvin, and regarded him with a certain respect. Between him and Bertha there existed a great friendship, and she apprehended his nature; she used to say that sometimes she was afraid of him, he looked at her so intelligently; she was never certain that he was what he appeared to be.

When I returned, they had laid Calvin on a table in an upper chamber by an open window. It was February. He reposed in a candle-box, lined about the edge with evergreen, and at his head stood a little

wine-glass with flowers. He lay with his head tucked down in his arms,—a favorite position of his before the fire,—as if asleep in the comfort of his soft and exquisite fur. It was the involuntary exclamation of those who saw him, "How natural he looks!" As for myself, I said nothing. John buried him under the twin hawthorn-trees,—one white and the other pink,—in a spot where Calvin was fond of lying and listening to the hum of summer insects and the twitter of birds.

Perhaps I have failed to make appear the individuality of character that was so evident to those who knew him. At any rate, I have set down nothing concerning him but the literal truth. He was always a mystery. I did not know whence he came; I do not know whither he has gone. I would not weave one spray of falsehood in the wreath I lay upon his grave.

#### WHILE THE ROBIN SINGS.

THE red-breast warbles in the leafless branches,

The first shy sparrow tries his tender trills,

And May, her girdle full of pallid blossoms,

Trails slow her faint-green robes across the hills.

And we rejoice; not with light words and laughter

We watch the soft relenting of the sky,

But with a touch of vague, unspoken heart-ache,

We say "The spring has come"—and smile—and sigh.

Yet we are glad. How is it that our gladness

Is thus sedate, and calm, and well controlled?

Is it that joy no longer craves expression,

Or can it be that we are growing old?

Have we so changed? Are sense and spirit duller

Than when our happy hearts made louder mirth?

Has it grown less, our fond and quick perception

Of all the lovely moods of sky and earth?

Once we exulted in the morning's crimson,

The evening's purple, and the sunset's gold;

And every gleam and cloud brought added rapture,

Ere we had thought or dreamed of growing old.

Yet still our grateful hearts leap up responsive

To the brave bluebird, laughing at the cold;

Our eyes note every tint of sky and ocean—

It cannot be that we are growing old.

No—while our nearness to the great All-mother

Preserves us humble, pure and tender-souled,

She gives us of her deathless youth and freshness,

And those who love her never can grow old.

The years may check or still our lighter laughter,

And hush our hearts with chidings manifold,

And spring may come and go, and find and leave us

Sobered, perhaps, but surely not grown old!



## TOPICS OF THE TIME.

## The Future of New York.

WHATEVER may be the result of conflicts and changes now in progress which tend to modify the relations of New York to the country, and to the cities that are striving to win and hold a portion of her trade, no one doubts, we suppose, that she is always to be our most important commercial city. Her position, connections, wealth and prestige conspire to insure so much as this, at least, while none of her intelligent citizens doubt that she is to remain the largest city of the continent, and to go on increasing until she becomes one of the few gigantic cities of the world. With Brooklyn, which is, in everything but name, a part of her, she is already as large as Paris. With Brooklyn again, she is as large as London was in 1825; and we see no reason why, in fifty years, she may not be as large as London is to-day. She has behind her the resources of a country many times as great as England; and though she will be obliged to divide her prosperities with other cities, to a degree that London has not been called to do, there would seem to be no limit to her growth. New York is not going to lack for business, whenever there is business to be done, or for population. She is evidently not going to command so large a proportion of the commerce of the country as she has done; but it must be remembered that the country grows all the time, and that we need to look forward but a few years, in what constitutes the life of a great nation, to find upon our soil a population of one hundred millions where there are now but forty millions. Philadelphia, Boston, Chicago, Cincinnati, St. Louis, New Orleans, Baltimore—all these are growing cities, and there is growth for them all, without hindering the growth of New York for a day.

But it is not of the commercial future of New York that we feel moved to write. We shall rejoice in the commercial prosperity of the city, as a matter of course, but after this the merchants will look, and the railroad men and the shipping men. Our special anxiety relates to other things. We have written of these things before, but we write of them now under new circumstances. It was but a few months ago that we had in this city, three men living, of exceptional and superfluous wealth. It is not to be denied that there were general expectations on the part of our people that these men, who had won so much money in this community, would do something for its higher interests. We needed a great picture gallery. We needed a great museum. We needed a great conservatory of music. There were so many things that we needed to raise the city to the position of a grand national capital—a capital in which every form and department of art could be studied and enjoyed—that our hopes and anticipations were very great though very indefinite. But the three men have passed away, and the community is but little the richer for them. Our Metropolitan Museum of Art grows with pain-

ful slowness; our great gallery of pictures is still uncollected; our Musical Conservatory is not organized, and still we are able to offer nothing to the student of art that will keep him from crossing the sea to do all his study. It is not to be denied that there is a better popular knowledge of art, and, in some of its branches, a better practice of it, in Cincinnati than there is in New York. The great city of the continent has not the pre-eminence in this matter that it ought to have.

It seems to us to be desirable, above all things, to make New York a good place to live in. The rich and well-to-do people, of all parts of the country, should be able to find in New York that which will make it a delightful home to them. The opera, the theater, the picture gallery, the museum, the library, the literary and scientific lecture, the choicest eloquence of pulpit and platform, bright and stimulating society in multiplied and multiform organizations—all these should combine to make a winter residence in New York so desirable that all who have money and leisure, wherever they may live, will indulge in the luxury. Dr. Johnson said to Boswell that the finest view in Scotland was the road to London, and that was before London was as large as New York is now. What we want is to have the road to New York the finest view to be seen anywhere in the country.

We hope it is now understood, as it has not been before, that nothing is to be expected from those who have more wealth than they know what to do with. Men who feel the cost, and who give with a sense of sacrifice, will be obliged to take hold and do this business. There are certain very desirable things in which New York has the lead that belongs to her, as the commercial metropolis, but they lie in lines closely associated with her commerce. The New York publishing interest, for instance, is metropolitan in its character. The newspapers of New York, in their relation to the country, are like the London newspapers in relation to England, and the Parisian newspapers in relation to France. The grand center of the book publishing interest is here, and the same may be said of magazines. The center of the publishing interest is not likely to change, under any circumstances. The present indications point to a more thorough concentration of this interest in New York than has previously existed; but we want so many other things, in order to make New York a worthy metropolis, that we can hardly plume ourselves on anything.

We say this, conscious that with all our poverty in the best things—in those things that give a city character and high attractiveness—New York is really the literary and artistic metropolis of the country. Here is where most of the artists live, and where all come to show their pictures. It is true, too, that wherever the center of the publishing interest is, there is the literary center. These two interests are never divided, or never for any con-

siderable length of time. Wherever the leading publishing interest is, thither the literary interest gravitates. But what we want are institutions, organizations, collections, schools,—and these cost money.

Can any loyal New Yorker think of anything better to do for his beloved city than helping to make it in every high sense a delightful home for his children, and for everybody throughout the country? The commercial future of New York may be brilliant beyond all its past; but its youth can furnish it no longer with an excuse for neglecting those high interests which must be recognized and incorporated with its growth, in order to give it character and make it a place worth living in. We have talked in another article in this number about making homes interesting. New York may be very large, very beautiful in houses and churches, very prosperous, and, after all, it may not be interesting. What the city needs most is to be made interesting, as London and Paris and Rome and Florence and Munich are interesting. When a stranger has once ridden through our streets, and driven around the Park, what is there left for him to see? It is a painful question to ask as well as to answer.

#### Houses and Things.

MR. CLARENCE COOK has lately said so much about houses, and the things that go to make them comfortable and beautiful, that the rest of us have been glad to stand respectfully among the audience, and let him do all the talking. A man of positive ideas, and a graceful and forcible way of expressing them, is not so frequently met with that we can afford to miss even his smallest utterance. But Mr. Cook would have people think for themselves. One of his aims is to stimulate independent thinking, and so to make every home, in its fulfillment of wants and its expression of tastes, a fresh and original growth. He would have us cut loose from the conventional, and look around for ourselves to find the natural and the picturesque. He would have us do away with shams and imitations, and have only that which is honest in structure and appearance. Specially would he teach us to do our own thinking.

So we propose to think independently a little, especially with relation to certain appointments of the house which, in these latter days, are suffering abuse, as it seems to us. The first thing to be spoken of is the carpet. We like a handsome rug. We like an inlaid floor. A handsome rug upon an inlaid floor is a beautiful thing to look at. In a warm climate it is not only beautiful, but fitting. A rug upon matting, during the cooler months, in tropical latitudes, is charming for many reasons; but for our cold country we like a carpet—ingrain, Brussels, velvet—no matter what—something that covers the floor. A wooden floor needs a great deal of service to keep it in presentable condition, and should be polished as often as one's boots, especially in latitudes where the boots have nails in them. Where the slipper is constantly worn, it

is a very different thing. A hard, polished floor, or a wooden staircase, is not a pleasant thing to walk on. It is slippery and noisy, and a rug is always kicking up at the edges, especially where there are children. We like a well-carpeted house—the thicker the carpet the better—especially during the severe winter months. A great deal is said about carpets as dust-catchers and disease-absorbers, and all that; but we very much doubt whether a well-swept and well-kept carpet is worse than a rug, in any particular. No one has at all demonstrated that it is worse, and in our climate it certainly is more comfortable than any other floor surface that is possible.

Furnaces, too, are abused, and open fires are advocated. Now, we have had a good deal of experience with furnaces, not only, but with open fires. In the first place, open fires are incompetent to heat our houses. In the second place, they are exceedingly dusty; and it somehow happens that the men who are very much afraid of the dust of the carpet set aside the dust argument when they talk about open fires. There is nothing that fills either carpets, or rugs, or atmosphere with dust so quickly as the open fire. The dust of a good furnace is the dust of the outside atmosphere—no more. An open fire is picturesque. It is cozy and home-like and ornamental; but when the outside temperature is at zero, mere picturesqueness will not answer. When a man is shivering, it will not comfort him to know that he is as picturesque as his fire, as he bends over it and pokes it. Furnaces are comfortable—there's no denying it. Carpets are comfortable too, and carpets and furnaces are going to live.

Even our plumbing is complained of, and men are taught to look back to a clumsy wash-stand and a big basin, and a heavy pitcher, as things that were pretty and sensible, and in every way more desirable than the modern hot and cold water that comes and goes with the turning of a cock or the lifting of a gate. Now it always seemed to us that a big water-pitcher was an awkward thing for a strong man to handle, to say nothing about a weak woman. Bathing the hands and face at an old-fashioned wash-stand—pouring water out of pitchers into basins, and out of basins into slop-jars—seems to us to be a very clumsy business, compared with that mode of introducing and dismissing water which has come in with "modern improvements." So we believe in plumbing, and not only don't believe it will ever be done away with, but are sure that it will go on unto perfection.

The mistake of this era in the history of "household art and home decoration," lies, it seems to us, in the attempt to do too much with furniture. Ruskin, in one of his books, distinguishes between building and architecture. There are certain structures in which architecture should never be attempted. A grain-elevator, a store-house, a barn,—these are buildings, and architecture is out of place in them. There is no more reason why they should be beautiful than there is why a meal-sack should be beautiful, or a wheelbarrow, or a coal-cart. So it seems

to us that there may be, and that there are, certain items of furniture which we may legitimately excuse from the duty of picturesqueness. If our carpets are less beautiful than rugs upon bare floors, if furnaces are less interesting than open fires, if the old-fashioned wash-bowl and pitcher are more picturesque than the plumbers' substitute, what of it? In which direction shall we make our sacrifices? Toward comfort and convenience, or toward the picturesqueness of ruder times and smaller means? We advocate comfort and convenience, and leave others to do as they choose. The modern advocacy of beauty, in connection with all articles of furniture and household convenience, reminds one of the child who insists on making play of everything,—who cannot take a mouthful of food, or do an act of service, without making it in some way a source of amusement.

To come to the practical point, a home may be interesting without being more than moderately beautiful, and may be more than moderately beautiful without being interesting at all. If we rely entirely upon furniture for the interest of a house,—if we make furniture picturesque at the price of comfort and convenience, our homes may be made interesting in a moderate way, provided we follow out our individual ideas, and do not fall back upon the conventionalisms of the manufacturers. But the most interesting things in a house should never be its furniture. Given convenient furniture, that shall be picturesque when convenient, the question whether a home shall be greatly interesting relates mainly to other things—to books, pictures, objects of art, bric-à-brac, and treasures of various sorts, in fact or in association. We can point to homes whose furniture attracts no attention whatever, but which are absorbingly interesting through the artistic products of its members. The more the culture and taste of cultured and tasteful people are expressed in their homes, through various modes and forms of art, the more interesting those homes will be; and the more a guest is compelled to forget furniture, except as it answers to the higher harmonies of the house, the better. The best things of an interesting home are never bought of a furniture dealer, though the most beautiful may be.

#### The Changes in Preaching.

THAT an important change is now in progress in the American pulpit, is evident to even a careless observer. The preachers now coming upon the stage are studying methods and arts as they have never done within our memory. A most important fact began, fifteen or twenty years ago, to manifest itself alike to teachers and disciples, viz., the fact that the great masses were slipping more and more out of the reach of the church, and that the preacher was losing his power, even over his own flock. It was hard for men trained in the old ways to understand the causes of this misfortune; but it became apparent at last to one, here and there, that a theological skeleton, unclothed with flesh and blood, and without a warm heart behind its ribs, was not an

inspiring object. It became apparent that the world was sick of theology, and, if it could not have the gospel, would not have anything. There are still many among the preachers who suppose that theology is the gospel, but they are rapidly passing away.

A very successful preacher, in a recent conversation, said that his theology was a sort of dry codfish which he hung up in his study by the tail, and whenever he wanted any of it he cut out a chunk. Another, of almost equal eminence, said, that while it seemed to him very important that a preacher should be well grounded in Christian doctrine, and have definite and well settled opinions on theology, he should never think of taking theology into the pulpit! Both these men are earnest men, and remarkable preachers, but they have made the clean jump into the new order of things. Can New England ever comprehend this—that a preacher can be in dead earnest, and yet, without any reservation, say that theology is a thing for the study and not for the pulpit? Of course it is nothing less than a revolution, but toward this is the drift of the day.

It is a significant commentary on the condition of the Christian mind of the country that this revolution needs explaining. There are great multitudes who have so identified theology with religion that they cannot conceive what a preacher who says nothing of theology can have to say, and what can be the object of his preaching at all. Indeed, we have heard a prominent preacher of the old sort confidently declare that no preacher can sustain himself, or find enough to talk about, who does not preach theology. He was honest in his declaration, and he will never be revolutionized, and never be very useful; but his successor will understand it, and his people will win the profit of his intelligence. To explain, then, what is involved in this revolution: the man who preaches theology exclusively, preaches exclusively to the head; and every man preaches to the head in just the measure that he preaches theology. The man who preaches the gospel preaches a person,—preaches a life and death and resurrection,—proclaims the good tidings of a divine message and a divine mission to men,—addresses and works upon the higher sentiments,—labors for the uprooting of selfishness in the heart and life, and the implanting in them of love as the dominant motive, and labors for a transformation of character. The great aim of the man who preaches the gospel is to make bad men good, and good men better,—to improve the quality of character and life,—to bring man into that harmony with God and the divine moralities which will be secured through the following of the Master. The old sort of preaching is not unlike the work of articulating a skeleton; the new sort is not unlike that of gathering and weaving a garland of flowers. There may be a certain amount of mental discipline in theology, but, on the whole, mathematics must be preferable; and, really, if a man feels that he must go for the heads of his congregation every time, let him drop his pen, and with a piece of chalk and a blackboard,

talk about something that he understands, and something that will be of practical value to his people.

Revivals have become necessary to the advance of Christianity, simply because of the incompetency of the ordinary preaching; and the moment the revivals come, the preaching changes, or it changes before they come. In the nature of things, there ought not to be much for a revival to do in any church which has had the simple good news preached to it, and in which the heart and life and better motives have been affectionately and persistently addressed. Revivals are nothing but a makeshift. It is not a very high idea of the Father of us all that supposes him any more willing to convert men at one time than another. Preachers full of the learning of the schools go on from year to year with their dry discourses, and wonder that nothing comes of them. Then a Christian ignoramus comes along, with burning love and zeal in his heart, and no theology to speak of in his head, and bad grammar on his tongue, and the long winter breaks up, and the waters flow once more, and the meadows blossom again. And this is done over and over, with some good results and many bad ones.

With the passing away of the theological essay, will pass away much of the necessity of written discourses; and it will be noticed that very nearly in the proportion in which the character of preaching has changed, has the oral supplanted the written discourse. We think it is seen now, with great distinctness, that, in addressing motives, direct speech from heart to heart is almost infinitely superior to the reading of pages conceived and framed in the study. If instruction were needed upon this point, the history of Methodism in this country would furnish it in abundance. With a ministry confessedly inferior in scholarship, at least in its beginnings, but with direct address from every pulpit to the heart and life, the success of this denomination has been enormous. With high culture on the part of its teachers, its progress would possibly have been wider, but they have at least proved that the direct, spoken discourse is a power which every pulpit should assume and use as soon as it can. The question whether a young man who cannot acquire the ability to speak well without reading has a call to preach is, to say the least, an open one. At any rate, this ability is what all divinity students are striving for.

Edward Seymour.

It is but a very few swift years ago that the sainted friend and associate who gave his name to this magazine passed away, and now we are called upon to note another departure from the lessening group of which he was the head. EDWARD SEYMOUR, of the firm of Scribner, Armstrong & Co., and one of the proprietors of this magazine as a member of Scribner & Co., died on the 28th of April, after a brief and painful illness, at the house of his father in Bloomfield, N. J. His death has brought a shock of grief to a wide circle of friends, and left a

vacancy in business and social life not readily to be filled.

Born April 1st, 1835, he was a little past forty-two years of age when he died. He was prostrated thus, at the maturity and highest activity and efficiency of his powers. And these powers were of no mean order. He was one of our comparatively few literary book-sellers—quite competent to judge a book, to write a critique upon a book, to prepare a book for the press, or to create a book. There was hardly any detail of literary work with which he was not familiar.

While at Yale College, of which he was a graduate in the class of 1858, he corresponded with the "New York Times," then under the charge of Mr. Raymond. One of the first scholars of his class, it needed but this modest introduction to secure a place upon the reporting, and afterward upon the editorial, staff of that journal, with which he remained connected until 1868, when he took a salaried position in the publishing house of Charles Scribner & Co. Soon afterward, he became a member of the firm, and at its dissolution on the death of Mr. Scribner, he entered the new firm of Scribner, Armstrong & Co.

Our readers will recall his recent article in this magazine, entitled "Trout-fishing in the Rangeley Lakes." The faithfulness with which the article was written, the keen love of out-of-door life which it manifested, the racy English in which the story was told, reveal the man as well, perhaps, as anything he has ever done, for it presented both sides of him—the conscientious literary man and artist, and the happy sportsman who was as fond of nature as of his own mother. His latest work was the editing and condensation of the life of Charles Kingsley. This was done with such cleverness as to call out the grateful acknowledgments of those who stood nearest in relation to the departed Englishman. But his life was full of work, and of work, too, that did not show—work which, in some instances, brought credit to others, never disowned by them. We can imagine no man more competently endowed by nature, or better furnished by study and experience, for the work which he undertook, than Mr. Seymour.

What we have lost as a friend in this sad death, it is harder to tell. Mr. Seymour was one of the most genial and companionable of men. He had a quick appreciation of everything that was humorous in conversation and incident, and a quick laugh at hand for its acknowledgment. He was like an unspoiled boy in this. A good story, a merry conversation, would beguile him of weariness and pain, and, indeed, it was the readiness with which, up to the last week of his life, he responded to the inspirations of his companionships, that deceived his friends and made it impossible for them to comprehend the dangerous character of his indisposition. His nature was particularly sunny, and it is sad for his friends to remember that it was particularly dependent upon the sun. Trouble did not stimulate—it depressed him. No man of his profession was more popular than he, and few were as widely and affectionately



known among contemporaneous authors, at home and abroad. There are few men, indeed, of any profession whose nature and personality are as acceptable and pleasing to such wide varieties of people as were those of Mr. Seymour. He won his way in the world, and never pushed it, and he never occupied a place in the popular esteem that was not, by every right, his own.

Mr. Seymour was a Christian, and for many years,

until his cares became too heavy to permit it, was engaged in various forms of Christian service. An affectionate associate, a man of culture and power, an earnest Christian, a tender husband, a loving and beloved father, and a true and genial friend—it is hard to realize that we shall see his face no more. We give our hearty sympathy to his family. We most affectionately write these words of honor to his memory.

### THE OLD CABINET.

THERE is a strange and interesting correspondence between the art of Tourguéneff and that of the late Jean-François Millet. We were very much impressed by this lately in looking over a portfolio of engravings after Millet's sketches. In these last were the same realism,—which yet is full of a most powerful imagination,—the same intensity, the same tragedy that we find in Tourguéneff. The parallel is seen to extend still farther when we come to Millet's painting—in color so rich, so full of vigor and charm, and also of solemnity.

It is said that Tourguéneff is not widely read in America. But certainly no living Continental author has equal influence over the younger generation of American writers. It would seem, too, that the often-noticed similarity between Russia and America, and the constant occurrence in his books of individual types, and of social and political situations which one had thought were peculiarly American,—it would seem that these accidents would be likely to hasten Tourguéneff's popularity in this country.

Since Mr. Boyesen's article was written, the story of "Assja" has appeared in the "Galaxy." In the number of that magazine for April, 1874, Mr. Boyesen gave an account of "A Visit to Tourguéneff," from which we quote the following. Mr. Boyesen had been expressing his admiration for Irene in "Smoke" when Tourguéneff replied:

"That character of Irene has a strange history. It was suggested to me from life. I have myself known her. And still it is not altogether the same; it is she, and still not she. I hardly know how to explain to you how characters develop in my mind. Every line I have written has been inspired by something which has happened to me or come within my observation. Not that I copy actual scenes and lives of actual persons—no; but they teach me a lesson and furnish me with the rough material for building. So also with a character. I seldom find it suitable to my purpose to copy directly a person of my own acquaintance, because it is but rarely that one finds a pure type. I then ask myself what nature intended with this or that person; what this or that trait of character would be if developed to its last psychological consequences. I do not take a single feature or a single peculiarity and make a man or a woman of it; on the contrary, I endeavor not to give undue prominence to any one trait; even if ever so characteristic, I try to show my men and women *en face* as well as *en profile*, and in fact in every attitude which has at the same time natural and artistic value. I cannot pride myself on strength of imagination; I have not the faculty of building in the air."

"What you say seems to me to explain the fact that your

characters also assume distinct features to the mind of the reader; at least I know it has been the case with me. Bazaroff in 'Fathers and Sons,' and Irene, I know as well as I do my own brothers; their faces are familiar to me; I look upon them as old friends and acquaintances."

"And that is the very way I look upon them too—that is, as men and women whom I have once known intimately, but whose acquaintance I no longer keep up. While I was writing about them, they were as real to me as you are at this moment. When a character is suggested to me, he immediately takes possession of my mind; he haunts me continually by night and day, and will leave me no peace until I have done with him. When I read, he whispers his opinions in my ear; when I walk, he persists in making his criticism upon everybody I meet and upon everything I see and hear. Then at last I have to yield. I sit down and write his biography. I ask who was his father and who was his mother, what sort of people they were, and of what kind of a family they came, how they looked, and what were their habits. Then I inquire into the particulars of my hero's education; what was his personal appearance, how and in what kind of a town or country did he spend those years of his life in which character is especially molded. Sometimes I go still further, as, for instance, in the case of Bazaroff, the nihilist. He had taken such a powerful hold on me, I had to keep his journal, in which he wrote his opinions on all the leading questions of the day, religious, political, and social. The same I did in the case of another rather inferior figure in 'On the Eve'—Well, I hardly remember his name this moment."

"Paul Shoubine," I ventured to suggest.

"Exactly—Paul Shoubine," he cried with visible delight; "why, you seem to know my character better than myself. Yes, it was Paul Shoubine. I have just been burning his posthumous papers lately; and they were bulkier by a good deal than the volume I published. These things I merely regard as preparatory studies; as long as there is anything misty about any of the figures, as long as their faces do not stand clear and distinct before my mind's eye, I can do nothing at all with my story."

"What you say about your inquiring into the pedigree and family history of your heroes, and even writing whole books about them, not intended for publication, reminds me of a very interesting article which appeared in the 'Atlantic Monthly' some time ago. The author, Mr. Lathrop, there proves that Hawthorne very soon abandoned the idea of publishing his romance 'Septimius Felton,' and that he looked upon it merely as a study, as an indispensable block in the pedestal which was to rear that exquisite though unfinished work of art, 'The Dolliver Romance.'"

"Yes," he said musingly, "Hawthorne was a man of energy and determination. I rather work *con amore*. Only to give you an instance of how involuntarily I often stumble upon a plot, I shall only mention the way in which 'Fathers and Sons' came into existence. As I was walking one day, I happened to think of death, and immediately I saw a scene at a death-bed. It was Bazaroff dying. The scene made a strong impression upon me, and then afterward the characters gradually developed."



The conversation was continued for several hours, and many other topics were brought up for discussion. As we parted, Tourguéneff made me a present of the German edition of those of his works which I did not already possess. Of "Spring Floods" and the one last written, "The Nobleman of the Steppe" (not "The Lear of the Steppe"), he gave me the French edition. \* \* \*

The last time I saw Tourguéneff was the evening previous to my departure for this country. His last words to me were: "*Au revoir in America!*" \* \* \*

In his twentieth year our author went abroad, and in Berlin studied German literature and the Hegelian philosophy. For three years he remained in Germany, and mastered the language to perfection. French he speaks like a native, and in English he has acquired great facility of expression; his foreign accent is just slightly perceptible in his use of rising and falling inflections, but his pronunciation is faultless. With his return to Russia in the year 1841 begins his literary career, although he is at present not disposed to acknowledge the poems which date back to this period as legitimate children of his brain. He gives the critic Belinski the credit of having opened his eyes to a truer appreciation of nature and of his own mission as an author. The time from 1846 to 1850 he spent in Germany, France, and Italy, and during this period appeared, besides a series of short stories, as "Petuschok," "The Jew," "Three Portraits," and "The Swaggers," that work which struck, as it were, the dominant chord of his life, and pointed out the direction of his whole future activity,—I mean "The Journal of a Sportsman." Here we find for the first time that deep, unconscious sympathy with nature, and those marvelously vivid and truthful pictures of the life of the serfs, which were to exercise so great an influence upon the future of Russia.

There has seldom been so interesting and important a confession of methods in literary art as this. We think that Tourguéneff's readers will, however, hardly agree with him as to his strength of imagination. He does not choose to do, or he may even not be able to do, a great deal of invention,—though, we imagine if his taste ran that way, he would find ability enough; but it would be as idle to deny imagination to the author of the "Purgatorio," as to the author of "Fathers and Sons." It must have been Tourguéneff's modesty that led him to say that, and not a lack of understanding of the nature of imagination.

To take an illustration from Millet,—how much more of imagination there is in that "realistic" drawing of his of the peasant who stands in the field, gaunt and crook-kneed, against the twilight sky, pulling on his blouse, after his day's work,—how much more of imagination there is in this than in Kaulbach's "Era of the Reformation." But, it may be said, why do you speak of Kaulbach's picture instead of Raphael's "School of Athens," where there are both imagination and invention?

Well, we are far from sure (as intimated above) that Tourguéneff has not in him the elements of invention such as this. Literary art was formerly divided into the classic and the romantic; Tourguéneff himself is called a realist—"the head of the realistic school in fiction"; but, is not realism a branch of romanticism,—is it not the natural reaction from the extreme to which romanticism has lately been carried? Is it not his individual taste (the result of contemporaneous influences) which induces his imagination to work realistically, as it is called, rather than a lack of invention. For, cer-

tainly, he *has* invention, there being only a question as to quantity.\*

THE Philistine outside of art, and the Philistine inside of art have lately been referred to here. There is another species, namely, the educated Philistine. Philistinism, as one learns from experience, is something inborn, and has little or nothing to do with circumstances. We are acquainted with an old colored woman, of very little education, but with a natural insight and an intellectual hospitality that mark her at once as anything but a Philistine. In fact, the more a Philistine is educated, the more his Philistinism becomes apparent. It is he who gives two or three very learned and excellent reasons for liking some very silly book or picture. Sometimes you reproach yourself for harboring hard thoughts of him; you say, "he cannot, after all, be such a bad fellow, for is he not an admirer of this or that great writer or artist? There must be some discernment in him." But soon you discover that the great man whom he admires has either been dead many centuries, or else, if a modern, is some modern about whose force there is no question. When brought to the test of a decision on some fresh subject, the educated Philistine at once betrays himself; for it now appears that his expressions of appreciation of contemporaneous or long departed excellence were mere lessons learned by rote. It is when the educated Philistine becomes a public and professional critic that his Philistinism is most painfully conspicuous. He tries to hide it, but, like murder, it will out. He finds that some famous critics have gained reputation, as he supposes, by their severity; thereupon, he himself falls to condemning with great heartiness; but the trouble is that he condemns among the bad also the really good books, or good pictures, or musical performances. If he praises, it is with the same uncertainty. Having no real insight or taste to guide him, he is of course continually making mistakes of this kind. But we need not regard him with pity, for it is one of the traits of the educated Philistine that he never finds out his mistakes. He is self-satisfied and happy to the last.

WE were struck the other day by the reply of a musician to a friend who had asked him to play on a piano which was out of tune. Some one was present who had not before heard the pianist. "Do play for us," said the musician's friend, "Mr. Blank will make allowances for the condition of the piano." "Make allowances!" replied the pianist, "I have heard that all my life, and it never was and never will be true. Nobody 'makes allowances.' If a pianist plays on a bad piano, or a tenor sings when he has a sore throat, or an orator gets out of his death-bed to make a speech,—the audience is disappointed because he does not do his best work,

\* Tourguéneff's works are published in this country, in English, by Henry Holt & Co. Mr. Boyesen has translated for the July number of SCRIBNER, one of Tourguéneff's most interesting shorter works, which will be printed, with illustrations by George Inness, Jr.

and it carries away an impression of the performance which is likely to last for a life-time. It's the same in housekeeping, and dressing, and business, and everything else. People expect the best under all circumstances. There is no such thing as 'making allowances.' "

We saw some time ago a picture of an oriental group surrounding a juggler who was lying on his back, on a rug, while he kept three poniards circling in the air above his bare throat. This idle and admiring group, we said to ourselves, represents a large class of the public; and this juggler represents the artist and his work, as understood by them. Art gives them no worthy emotion; they are filled only with a pleased wonder.

A part of what we call the public look upon all art as a sort of jugglery—a picture is with them a sleight of hand performance. They have a childish delight in seeing a man's hat or a piece of crockery painted so that it "looks just like the real thing." It is a fact, by the way, that so badly are our eyes trained in seeing, and so influenced have we all been, unconsciously, by poor and untruthful drawings and paintings, as well as by photographs, that the things which the public suppose to be just like the natural objects are apt to be in reality extremely unlike them. There is little doubt, for instance, that the fourth-rate portrait painters, who used to do so large a business in this country before the advent of photography, gave much better satisfaction with their "likenesses" than the old masters would have given to the same class of patrons.

There is, of course, a certain legitimate sleight of hand in painting, but this is merely the technical skill which comes by practice to the painter, as it comes to the pianist, or to the mechanic. The imitative jugglery which the public especially admire, such as the veiled ladies of sculpture, the yellow mists which some of our painters are always spreading over their pictures, the reflections in water, the streaks of sunshine, and other illusions,—such, for instance, as Gérôme uses in his "Sword Dance,"—these and a hundred similar devices are, of course, the cheapest sort of effects. They cost the painter nothing in the way of thought. He can do them easily and at any time. They are really what the untrained public consider all art to be—nothing but trick,—the miracles of Heller.

The true miraculous in art is a different thing. In pictures of real worth there is often a mysterious quality which is not the result of legerdemain. We do not now refer to that element in a picture which makes it a picture, and which impresses itself upon every cultured beholder and often upon the uncultured; but we mean a mystery of technique,—some effect of color or tone which painters only, or those especially trained, can detect. A painter will look at the work of another painter and say (speaking of the technique) "Here is something I cannot account for. I do not see how this was done."

We know there are painters who hold that great effects may be produced by a kind of cold mathematical calculation. This undoubtedly is so, if the

calculation is made by a man of extraordinary force—(it always comes back to a question of the artist's individuality). But even with painters who believe this there are fortunate moments which bring extraordinary results, by means which they themselves are hardly able to render an account of.

Is there not something in the making of poems analogous to this mystery of technique in painting. Those are not poor poems in which the reader can, as he imagines, trace the workings of the poet's mind. Take, for instance, Keats's sonnet "On first looking into Chapman's Homer." One of the pleasures of reading that sonnet is the feeling one sometimes has that he sees it growing under his eyes. On the other hand we have heard a person of great discernment say that he could tell something about the way that everybody's poetry was made except Emerson's. That completely nonplussed him. He did not know where it came from, or how it was done. There was humor in the observation, but no disparagement either intended or to be inferred.

THE articles in "MacMillan's Magazine" on Charlotte Brontë are now, with additions, brought out in book form.\* They really make a new, original life of "Currer Bell." The book is intensely interesting. Its literary style is not in all respects adequate; the sentences are rounded a little too much in the manner of the special correspondent; but the work has been done with industry and sympathy. In one respect the "monograph" is superior to Mrs. Gaskell's "biography." Mr. Reid does not make Mrs. Gaskell's mistake of imputing coarseness to portions of Charlotte Brontë's stories.

It seems an astounding thing that one's most intimate correspondence may be subject to the fate of Charlotte Brontë's letters. There are not many men or women whose letters would stand the test of publication so well. These letters of Charlotte's (which are now first gathered together) are restrained and quiet. Their freedom from sentimentality and gush gives one renewed confidence in the intensity of expression in her formal, published works.

#### Singer and Poet.

"MAKE me a summer song, for music meet,  
And you shall hear it when you come again—  
Let it be full of life  
And sunshine and of flowers.

"It must run so,"—she laughing spoke, and then  
Struck the white keys and played a joyful tune:  
'Twas winter, but I thought  
The birds began to sing.

I waited till the frozen buds should bloom  
For then, I said, my song were better tuned—  
Catching a sound of mirth  
From the awakening world.

O friend,—dear friend! The winter has gone by  
But still thy poet's song will not be glad,  
While the bright flowers of June  
Blossom above thy grave.

\* Charlotte Brontë. A Monograph. (With Illustrations.)  
By T. Wemyss Reid. London: MacMillan & Co. New York:  
Scribner, Armstrong & Co.

## HOME AND SOCIETY.

## Glassware and Glass-houses.

"A PERPLEXED Housekeeper," writes to us on the subject of glass for the table: the time has come when her "nice, beautiful and complete sets of cut glass have been made almost a total wreck by the vandal hands of irrepressible Bridget," and she "hardly dares ask a few friends to tea, until she can replenish her table with this necessary ware." In such a plight, one would think that persons of ordinary Christian feeling would try to soothe the anguish of their neighbor, and if they could not help her to lay in a new stock of glassware, that they would at least refrain from throwing metaphorical stones at such glass as she has. Yet her letter reveals the painful fact that she has a heartless friend named Amelia, "who visits friends in the city," and who taunts her with the unfashionableness of her "goblets," assures her that this form of drinking-vessels is no longer tolerated, tumblers being the only proper thing; and when she sees the tears starting to the eyes of the perplexed housekeeper, she slyly exclaims, "Ha! now will I draw the waters!" and gives her an additional stab with the stern tidings that "hollow-stem champagnes are entirely tabooed, and that the few sherry and claret glasses she has left are entirely out of style!" Need we add that the anxious housekeeper confides to us her secret hatred for her dear friend Amelia, and assures us that while she has "the greatest confidence in what she says," "she would like to prove to her that she doesn't know everything!" And we are to be the means of helping the perplexed housekeeper to this revenge upon her friend Amelia—"who visits friends in the city." She asks us to give a little space to "glass," to tell our readers the "correct shape, size, and style of table-glass—whether it should be engraved or plain," in short to put her in possession of a complete armory by which, on her next visit, she can utterly demolish and confound the heartless Amelia.

Well, Amelia is certainly wrong. If, when she next "visits friends in this city," she will go to Tiffany's or Collamore's, she will find that cut-glass—the old-fashioned, heavy, many-faceted cut-glass of our grandmothers—is glittering and sparkling in prismatic splendor on the tables of all the fashionable people of to-day—that is, all the fashionable people who do not like glass of the thinnest make without any "cutting" at all! So with goblets. Nobody uses goblets to-day who prefers tumblers, unless it be the people who like both! And engraved glass is seen on every table that has a right to call itself fashionable, provided the owner of the table does not better like glass that is not engraved. But, to make sure that he is doing the right thing, and having plenty of money, he will order engraved and unengraved glass together, and the result is that "proper" people, like Amelia, don't know where they stand, and think they have fallen on degenerate days.

Degenerate or not, the facts are these. There is now an absolute liberty of choice in glass as in everything. Among sensible people who stood on their own feet, there always was this liberty of choice, of course; but now, liberty of choice is "the thing." Said one well-known dealer to us, the other day—If you ask me what is the fashion in glass, I say everything is the fashion. Some people think there is nothing like heavy cut-glass, others think there is nothing like Baccarat's crystal, or the English glass, as plain in form as Baccarat's, but clearer, more brilliant. Some people think engraved glass very desirable, while others will not have it, or have only a piece or two to show as a curiosity, or to put at the service of a favored guest. In short, the tastes of no two people are alike, and in the very heart of what is known as the best society, every one has perfect liberty to furnish her table as her own taste may persuade her.

Our own preference leads us to recommend the plain English or the French Baccarat glass—the latter so called after the manufacturer. The shapes of the tumblers, goblets, wine-glasses, and preserve-dishes, of English and French make alike, are simple and make no pretense of novelty, but for this very reason they will be found to please longer than forms got up to catch the eye of people bent on being "in the fashion." All table-glass needs to be kept not only immaculately clean, but highly polished, and of course this is more difficult to accomplish with the plain glass than with such as has eye-taking ornaments upon it, just as plain body-linen is harder to launder than such as is frilled, tucked, and embroidered. We shall not be misunderstood; we mean that, in the one case, there is no escape from the inquisitive eye—every spot tells, every cloud shows, and immaculateness is harder to accomplish. In the other case there are hiding-places for specks and flaws, and the eye of both maid and mistress is more easily satisfied.

The housekeeper wants her table, when dressed, to please the sight. But some are pleased with neatness and a Quaker simplicity, others want picturesque oddity, and others again want richness and abundance. In our present state of freedom, we can, all of us—"Quakers," "artists," "leaders of society" in this, that, or the other Little Pedlington—dress our table to suit ourselves. And a good thing it is that there are such differences of taste. To show how little any formula of style or fashion holds in our society, we may tell our perplexed housekeeper that in the principal shops of New York the salesmen will show you "sets" of all the kinds of table-glass, heavy, cut, plain, engraved, and Venetian, and then will tell you that many people like to mix all these up, to have the tumblers or goblets of one kind, and even to alternate the guests with tumblers and goblets (think of that, thou Amelia, who visitest friends in the city!) then, claret, champagne, hock, sherry,—liqueur plain, en-

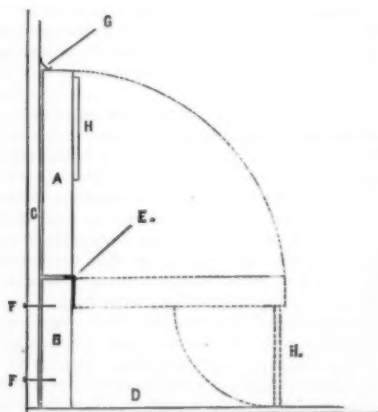
graved, colored—like a bouquet of flowers at each plate. Perhaps at dessert a dish of Venetian glass, milky white, with its roses and green leaves about the edge, will be set to holding the fruit, while a dish of heavy cut-glass at one end gives back sparkle for sparkle with the jelly that fills it, and a dish of English crystal with twisted handles at the other end, matches with its smooth severity the severe smoothness of the blanc-mange.

We advise our perplexed housekeeper not to let her life be made miserable by her friend Amelia, nor by the fear of what her friends' friends in the city are doing or saying. Just let her please herself—put money in her purse, and go to see Tiffany or Collamore and buy what pleases her womanly eye, aided if need be by the experience of the salesman, though she will be better without it. If she can be really independent, pleasing herself, and if she have the taste that women have so often—she will dress her table so attractively that her guests will all be inly persuaded she has been "visiting friends in the city," and has learned the latest news. "We are the makers of manners, Kate," says young King Harry to his princess, and every housekeeper, with a taste of her own and independent enough to follow it, will find herself making the manners of all her neighborhood.

C. C.

#### A Makeshift Bedstead.

Two or three summers ago it became desirable to construct for use in a diminutive sea-side cottage, a bedstead which should be always ready when wanted, and yet out of the way when not in use. A simple box-frame was made by nailing together four pieces, the sides being about seven feet long and the ends two and a half. The pieces were five



A, End of box frame; B, scantling; C, wall; D, floor; E, T-hinge; F, F, screws fastening scantling to wall; G, hook; H, H, legs.

inches wide. Across this frame stout slats were nailed for the mattress to rest on. Two pieces of light scantling of the proper length for legs and a

little wider than the frame pieces were then screwed to the wall about five feet apart, care being taken to place the screws where they would hold firmly. To these the frame was hinged with two strong wrought-iron T-hinges, fastened to the lower edge of the side, so that the whole frame could be raised close against the wall, and held in that position by a hook. To the outer side of the frame, legs were hinged so that they would by their own weight drop against the slats or between two of them, when the bed was raised.

The contrivance has served its purpose admirably in the cottage in question, and the device is perfectly applicable to a larger bed, where economy of space is desirable. Any of the ready-made wooden cots, the Howe patent, for instance, may be arranged in like manner. When not lowered for use, a coverlet may be hung over the unsightly slats, or a shelf may be placed above the bed, and a curtain hung from its edge may be as ornamental as taste or purse permits.

The mattress and clothing resting on the slats are wholly within the box-frame, so that it can fit as closely against the wall as is indicated in the diagram. If necessary, the hinged legs can be prevented from swinging too far outward by attaching to each of them a cord of the proper length. When rightly hung, however, they will not need this.

The object of the pieces of scantling is, of course, to "bear" out the bed from the wall so that it can fold up closely, but long pieces fastened horizontally and supported by brackets would serve quite as well, and would prevent a child from falling out of bed. Indeed, if pieces of scantling are used, it is well to nail a long board upon it to serve as a preventer as specified.

A bed arranged in this way, as it might easily be, would give many a young fellow who has to live in a hall bedroom, twice the space he can otherwise enjoy.

C. L. N.

#### Cistern Water.

IN our climate, where rain is abundant during a considerable portion of the year, the water falling upon the roof of any house, if properly collected and stored, is ample for the whole supply of the family which that roof shelters. This water as it falls is ordinarily free from any impurity that can affect its taste, and from every source of serious fouling, though after a long-continued drought it is well to divert and discharge upon the surface of the ground the first ten minutes' flow of a shower—so that the impurities of the air, and the dust of the roof may be first removed. After this first dash, lead to the cistern all that follows. Even with this precaution the water will be more agreeable for use if filtered. There are numerous systems for making filters in cisterns, but no other is so simple, nor so durable and satisfactory as the separation of that part of the cistern from which the suction-pipe leads by a wall of brick and cement. It is simply necessary to build a wall of brick set on edge (two and a half inches thick), so as to include about one-quarter of the area of the bottom,

sloping it back so as to terminate against the side of the cistern at a height of from four to six feet. This wall should be so well cemented at its joints that water can only pass through the material of brick, and for strength its form should be slightly bulging. A wall of this sort, measuring say six feet at its base and rising to a height of six feet at its highest point, will transmit an amount of water sufficient to supply the demand of the most constant pumping that any domestic use can require.

G. E. W., JR.

#### Camp Stoves and Cooking Utensils.\*

If you have a permanent camp, or if moving you have wagon-room enough, you will find a stove to be most valuable property. If your party is large it is almost a necessity.

For a permanent camp you can generally get something second-hand at a stove-dealer's or the junk-shop. For the march you will need a stove of sheet-iron. About the simplest, smallest, and cheapest thing is a round-cornered box made of sheet-iron, eighteen to twenty-four inches long and nine to twelve inches high. It needs no bottom: the ground will answer for that. The top, which is fixed, is a flat piece of sheet iron, with a hole near one end large enough for a pot or pan, and a hole (collar) for the funnel near the other end. It is well also to have a small hole, with a slide to open and close it with, in the end of the box near the bottom, so as to put in wood, and regulate the draught; but you can dispense with the slide by raising the stove from the ground when you want to admit fuel or air.

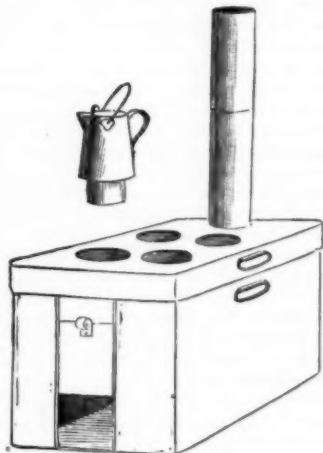
I have used a more elaborate article than this. It is an old sheet-iron stove that came home from the army, and has since been taken down the coast and around the mountains with parties of ten to twenty. It was almost an indispensable article with such large companies. It is a round-cornered box, twenty-one inches long, by twenty wide, and thirteen inches high, with a slide in the front end to admit air and fuel. The bottom is fixed to the body; the top removes, and is fitted loosely to the body after the style of a firkin-cover, *i. e.*, the flange, which is deep and strong, goes *outside* the stove. There are two holes on the top  $5\frac{1}{2}$  inches in diameter, and two  $7\frac{1}{2}$  inches, besides the collar for the funnel; and these holes have covers neatly fitted. All of the cooking utensils and the funnel can be packed inside the stove; and, if you fear it may upset on the march, you can tie the handles of the stove to those of the top-piece.

A stove like this will cost about ten dollars; but it is a treasure for a large party or one where there are ladies, or those who object to having their eyes filled with smoke. The coffee-pot and tea-pot for this stove have "sunk bottoms," and hence will boil quicker by presenting more surface to the fire.

You should cover the bottom of the stove with four inches or more of earth before making a fire in it.

To prevent the pots and kettles from smutting everything they touch, each has a separate bag in which it is packed and carried.

The funnel was in five joints, each eighteen inches long, and made upon the "telescope" principle,



which is objectionable on account of the smut and the jams the funnel is sure to receive. In practice we have found three lengths sufficient, but have had two elbows made; and with these we can use the stove in an old house, shed, or tent, and secure good draught.

If you have ladies in your party, or those to whom the rough side of camping-out offers few attractions, it is well to consider this stove question. Either of these here described must be handled and transported with care.

A more substantial article is the Dutch oven, now almost unknown in many of the states. It is simply a deep, bailed frying-pan with a heavy cast-iron cover that fits on and overhangs the top. By putting the oven on the coals, and making a fire on the cover, you can bake in it very well. Thousands of these were used by the army during the war, and they are still very extensively used in the South. If their weight is no objection to your plans, I should advise you to have a Dutch oven. They are not expensive if you can find one to buy. If you cannot find one for sale, see if you cannot improvise one in some way by getting a heavy cover for a deep frying-pan. It would be well to try such an improvisation at home before starting, and learn if it will bake or burn, before taking it with you.

Another substitute for a stove is one much used nowadays by camping-parties, and is suited for permanent camps. It is the top of an old cooking-stove, with a length or two of funnel. If you build a good tight fire-place underneath, it answers pretty

\*We take these timely suggestions from a practical little volume by John M. Gould, entitled, "How to Camp Out," recently published by Scribner, Armstrong & Co.



well. The objection to it is the difficulty of making and keeping the fire-place tight, and it smokes badly when the wind is not favorable for draught. I have seen a great many of these in use, but never knew but one that did well in all weathers, and this had a fire-place nicely built of brick and mortar, and a tight iron door.

Still another article that can be used in permanent camps, or if you have a wagon, is the old-fashioned "Yankee baker," now almost unknown. You can

easily find a tinman who has seen and can make one. There is not, however, very often an occasion for baking in camp, or at least most people prefer to fry, boil, or broil. Camp stoves are now a regular article of trade; many of them are good, and many are worthless. I cannot undertake to state here the merits or demerits of any particular kind; but before putting money into any I should try to get the advice of some practical man, and not buy anything with hinged joints or complicated mechanism.

## CULTURE AND PROGRESS.

### The National Academy Exhibition, 1877.

ABOUT fifteen years ago there was a "revival" in American art somewhat similar to that which is marked by the Academy Exhibition of the present year; and fifteen years before that there was another. But we doubt whether either of the two former "revivals" was so appreciable by the public as the latest. This year the new men have fairly carried the exhibition and the world by storm.

It is said by some of the wise-heads that all this juvenile display is mere cleverness and imitation. "These boys," it is declared, "are merely repeating by rote the lesson learned from their masters. There is nothing in it, and nothing behind it." There is a certain amount of truth in this: It is beyond controversy that many of these baby artists have yet to prove that they can stand alone. Methods and technicalities are one thing, and art is another. They have learned how to talk,—hereafter it will appear whether they have anything to say.

But certainly we do not see any reason in the condemnation which has been lavished upon these cunning youths. That they *have* learned the methods, is evident enough: that they *have* acquired the language so far as their masters could teach it to them, is beyond dispute. Of course they have much more to learn with regard even to the mere technicalities of painting,—for we doubt if any artist, old or young, has said to himself "At last I know it all,"—but on the whole they have been bright pupils and have gone as far—these young Americans—as students to the manner born; they are painting as well to-day in Paris and Munich and New York as any students of their age; and this although having spent but a few years in an "art atmosphere" instead of a life-time. The fact that so many of our young men have gone to work with such keen enthusiasm to get the best art education available, and that they have shown so much aptness and ability, and have succeeded so admirably—we say that this is full of interest and encouragement, and should be greeted with applause, and not with disparagement.

One of the most interesting of the young men whose work is displayed this year is the Munich student Duveneck. As one stands before his gorgeous painting of still-life, of which the attenuated "Turkish Page" is a mere accessory, one says to

himself "Here is humanity wrecked on the shore of decoration!" It is a brutal picture. The dark-browed skeleton-armed boy—there is no more consideration for him, than for the public who are made to look at him. The colors are piled on with savagery. For all that, it is a glowing and splendid canvas,—painted with delight, and with an artist's love for color, if not with an artist's love for human nature. As a studio study it is full of promise. High toward the ceiling we find another Duveneck; a portrait of Charles Dudley Warner, which we wish were within inspecting distance,—for, though a bit mannered perhaps, it seems to have a sense of character and a subtlety which are excellent complements to the qualities of the larger and nearer picture. W. M. Chase has worked under the same influences as Duveneck, and even in the same studio, for his "Unexpected Intrusion" is a clever study of the same "properties" as are used in "The Turkish Page."

Walter Shirlaw, also of Munich, has the brilliancy of Duveneck, though not, perhaps, his richness and depth of color. His "Sheep-shearing in the Bavarian Highlands" is the most prominent *genre* picture of the exhibition. It should be seen at a distance, and should be looked at for some time, if one wishes to lose the first impression of confusion in the composition. Many of the separate parts of this spirited and graceful work are undeniably good, and it contains some excellent rendering of character. Dielman's little study of a "Patrician Lady" is one of the best pieces of painting here. It is especially admired by artists for its tone; although in point of technique it is exquisitely managed in every particular.

Among the young men from Paris Edgar M. Ward is conspicuous. His work is good, though without much fire. Mr. Ward's strong point is not his color; some of his pieces are dull and inky, and would perhaps find nearly all their best qualities preserved in an engraving or photograph; but the color in his most important work "Washing-Place, Brittany," is more agreeable than in the examples in the north room. We do not think that this picture suffers by its proximity to the more ambitious work of Shirlaw,—for although not so brilliant as the latter, its subdued color is a rebuke to the not very costly profusion of the "Sheep-shearing." Hovenden's work has much in common with that of Ward.

Julian Weir, the youngest of a family of artists, exhibits some clever pictures of varying excellence; in his head of a "Peasant Girl of Brittany" he has expressed, with unusual refinement, all the charm that could be found by a thoughtful observer in a face which most people would pass by as uninteresting. Abbot Thayer carries out the promise of his earlier work; he has lost none of his individuality, and has gained in knowledge and in mastery of his material. Mr. Thayer calls himself an "animal painter," but we have heard artists say that there are no better figures of children in the exhibition than those with his "Stubborn Donkey." This picture is painted in a gray key, but the color is so pure and delicate that instead of being quite put out of countenance by its somewhat gaudy surroundings, it helps to make the color of most of the pictures about it seem crude and ugly. We think that after many visits to the exhibition the careful observer will conclude that few of the younger men have made such substantial advances as Mr. Thayer in learning the art of painting. His work is as strong as it is gentle and refined; he shows not only taste but brains. We wish we could be as confident of the future of these showy Munich boys as we are of his. Sartain has here some interesting heads, and his "Narcissus" is apparently a good life study, although it is too high to be seen to advantage.

We can barely mention Low, who has a very clever "Revery" in the Carolus Duran manner,—a manner which he will do well to forsake as soon as possible; Hamilton, whose subject, in "Le Rire," will cause many to overlook the artistic excellences of the painting (it is a coarse and unpictorial subject, surely, but not treated coarsely); John W. Bolles, who sends a very bad "Esmeralda," and a very good picture of a "Woman testing an Egg;" Maria R. Oakey, whose "Innamorato" shows a fine sense of decorative color; George Inness, Jr., with some cattle pictures not so spirited and satisfactory as his sketches; Mrs. Whitman, whose decorative panels, exhibited elsewhere in New York, show so much freedom and grace, and who exhibits a head painted with much feeling, and a poetic "Sunrise at Newport;" the vigorous, if conventional, drawings of Erxleben on the stair-way; Miss Bartol's strong "Portrait;" interesting heads by Gortelmeyer and Witt; the beautiful landscapes of Waterman; Champney's sketches and figure subjects, or the pictures of Knight, Swift, Macy, Hitch, Mrs. Gifford, Miss Lea, and Miss Stone. The works of Benjamin C. Porter, of Boston, are among the most attractive in the exhibition; his color is rich and soft, though wanting in depth and intensity. Wyatt Eaton, while apparently lacking the intensity and brilliancy of Duveneck and others, shows qualities which are likely to carry him as far as they if not farther. His "Harvesters at Rest" has a solidity and reality of drawing and a seriousness of purpose which make it a picture, and not a mere bit of decoration. Whether or not it augurs well for him, Eaton has certainly avoided acquiring the mannerisms of his European masters. Gérôme was his teacher, but there is nothing of Gérôme's personality in Eaton's work; he had the advantage of

Millet's friendship and influence, yet the "Harvesters at Rest" is utterly unlike Millet both in spirit and in method.

If we turn now to the artists with whose names the public are more familiar, we find that while many of them—Sanford Gifford, McEntee, Le Clear, Whit-tredege, Wyant, Heade and others—are fully represented here, the greatest advances seem to have been made by Inness, Miller and Swain Gifford. Inness should be especially praised as one of our older artists who has not fallen into the ruts either of ignorance or indifference. The landscapes of no painter in the exhibition, young or old, are so luminous, so full of vitality. This artist has lost none of the force, and what is still more remarkable, none of the curiosity of youth. Mr. Miller, a much younger man, has taken a long step in advance of his former work, reaching, in one example at least (445, "Autumn"), a largeness and a strength of treatment which we associate with the masters. In color Mr. Miller's "Autumn" approaches the work of Inness. Mr. Swain Gifford's landscapes, while as usual good in color, show a marked increase in power and interest. It would be interesting to review the examples of T. Moran, who proves his versatility by coming out in quite a new rôle this year; of Homer Martin, whose color is always subtle and original; of Winslow Homer, whose landscape is one of the freshest and strongest on these walls; and of Eastman Johnson who would always make agreeable pictures, if he had taste to guide him in the choice of subjects,—as witness his admirable "Dropping Off" and his painful "City People in Country Quarters." Mr. Julio sends, from the South, a picture of negroes harvesting cow-pea-vines, which shows, what he intended to show, that negro life may furnish subjects to the artist aside from its comical features. If this artist should receive the requisite training in color, he would send north much more agreeable pictures in a line of character which he seems to be able to handle. Winslow Homer's "Cotton Pickers," exhibited lately at "The Century," is a work which Mr. Julio might study to advantage.

The sculpture is so huddled that it is impossible to see or judge of it. There are several examples here of Mr. Hartley's work, which is always graceful, if not strong, and a striking portrait-head by a pupil of St. Gaudens, whose own work we are sorry not to find represented. In the East Room a portrait-head by O'Donovan seems to be an honest and good piece of modeling.

Many interesting pictures cannot even be named, but enough has been said to indicate that there is unusual life and movement in art. It is true that not many of the older and very few of the younger men show much thought; there are not many profound ideas or emotions to be gained in walking through these galleries, whose walls are so crowded, but when we see such increasing numbers of painters, and such increasing numbers of persons interested in painting, the chances are favorable for the outcropping of genius and for its due appreciation and encouragement.

"That Lass o' Lowrie's."\*

If we are to judge a story by its power over its intelligent readers, "That Lass o' Lowrie's" must take no mean rank. The critic who reads it with sympathy is hardly in a mood to write dispassionately about it. The story produced a profound impression as it was read in its serial form, but the impression is greatly deepened and strengthened as we turn the pages of the book, and are swept along on the rapid current of the narrative—where one heart-compelling scene follows another with the vividness and intensity of an acted tragedy, relieved here and there by passages of bright and genial humor. Few novelists have Mrs. Burnett's ability to bring before our eyes a scene in which men and women seem to be actually moving and speaking. The "Lass" standing with the child in her arms, and confronting Liz's tormentors in a flame of wrath; Joan "shadowing" Derrick on the Knoll Road; the death of Lowrie; Joan's appeal to the men to let her join the party of rescue; her appearance in the evening at the gate of the house in which Derrick lay; the last scene in the book, where Joan turns away from her lover and leans her head against the tree,—these, and many other pictures, linger long in the memory. And this is not merely because the separate incidents are related with vivacity; but because the author understands the human heart, and makes her characters act not only consistently with her view of their different individualities, but in accordance with what we feel to be truth to nature.

We think that there are evidences that the author has not in every case thoroughly understood her own characters, though she has generally reported their actions correctly. It would be strange if so young and inexperienced a writer should make no mistakes of this kind. On the other hand, there is often a subtlety of observation, that gives good promise for her future work. Of Liz it is said, and every reader of the book will recognize the aptness of the illustration: "her shame, her grief, her misery, were all mere straws eddying on the pool of her discomfort." Liz, by the way, seems to us perfectly drawn; there may be false touches here and there in the drawing of other characters,—even that of Joan, however strong and successful the portrait as a whole,—but Liz in every action and every word is accurately portrayed.

This author's pathetic power is remarkable. Many story-writers can describe situations supposed to be pathetic; but it is not often that these situations deeply move the reader. Mrs. Burnett, however, rarely fails to make her story affecting when she attempts to do so. Her humor also is fresh and sustained. Sammy Craddock is an original and delightful creation,—a study of character relying for effect not upon distortion or exaggeration, but upon its inherent truthfulness. "Owd Sammy" is autocrat of the village, not merely by virtue of his wit,

but by reason of his own innate sense of superiority. When Derrick thrashes Lowrie, "Owd Sammy" stands one side and tranquilly assumes the position of the victor: "He's done a bit o' work as I'd ha' takken i' hond mysen long ago, if I'd ha' been thirty years younger, an' a bit less stiff i' th' hinges." Even when, at last, he sees fit to apologize to the "little parson" he wears the apology as a feather in his cap, and by no means as a token of surrender and mortification.

Mrs. Burnett is, we fear, in danger of writing when she has nothing to say; but some of the short stories which have appeared since "That Lass o' Lowrie's" was written have shown maturing powers of observation and, we think, a more precise literary style, with no falling off in humor and pathos.

Bret Harte's "Thankful Blossom."\*

BOTH Mr. Bret Harte and Mr. Howells seem to be casting longing glances of late toward the stage. To be sure, the former has come out actually as a playwright, but in "Thankful Blossom" he seems to have reverted again to the half-way house still occupied by Mr. Howells with his recent "Atlantic" story called "Out of the Question." They both linger, as it were, in the greenroom, for the stories are not actable enough to be thought of for the stage, yet smack so much of the scene-shifter that their natural habitat is inside the walls of the theater. The two are, however, very distinct departments of literature. While a story gives a thousand chances for quiet and thorough painting of character, a play has to be comparatively superficial, since it treats of actions of people more than their impulses and thoughts. Hence the effort to combine the two, however cleverly done, is pretty sure to be less successful than the writer expects. Charles Reade, in some of his early novels, knew how to do it about as well as any one; but even with him the eventual success of the plan is problematical.

"Thankful Blossom"—the name of a pretty girl in Morristown, N. J., A. D. 1779—is a story without depth and reflection, yet not ready to be put upon a stage. It is clever, but then we have a right to expect Mr. Harte to be clever. It consists chiefly in action, in "scenes," yet it would never do as the basis even of a comedietta. The first scene gives a winter meeting between Thankful and her lover, Major Brewster of the Connecticut troops. The next is the arrest of Brewster, by order of General Washington. In part second, Thankful's father and two mysterious foreigners figure, one of whom shows his good taste by kissing Thankful. Then Major Van Zandt arrives to quarter himself on Blossom, and tells Thankful of her lover's arrest. Thankful rides off to General Washington after having horsewhipped Van Zandt by mistake. Some rather dull and pointless scenes give historical views of Washington. Brewster's villainy is exposed, and

\* *That Lass o' Lowrie's*. By Frances Hodgson Burnett. Illustrated by Alfred Fredericks. New York: Scribner, Armstrong & Co.

\* *Thankful Blossom. A Romance of the Jerseys, 1779*. By Bret Harte. Illustrated. Boston: James R. Osgood & Co. 1877.

Thankful finds herself in love with the horsewhipped Van Zandt. Brewster escapes. Van Zandt chases him, and Thankful chases Van Zandt. She overtakes him, nurses him through the small-pox, and insists on marrying him. *Finis.*

The story is very light and will not require much mental effort to read; but it may occupy a spare hour or so agreeably enough. It is a pity we do not get more real Western character drawing from Mr. Harte. He has shown himself able in that field, and certainly it cannot have been exhausted by what he has already given the world.

"The Unseen World."\*

It is not often that a volume of essays by a single author covers so wide a range of topics as this of Mr. Fiske's, including, as it does, speculations upon immortality, parallels between ancient and modern life, and theological, literary, historical and musical criticism. Perhaps the most satisfactory treatment which our space allows will be given by a separate consideration of one or two essays which we have found among the most striking. That from which the book takes its title was suggested by an ingenious theory put forward by two English physicists, which bases on the latest scientific explorations of the material universe the possibility of a future life for man. In approaching the subject, Mr. Fiske first sketches with a vigorous hand the daring and brilliant theories broached in late years as to the origin and the probable ultimate fate of the solar system. Of these theories, that which deals with the past—the Nebular Hypothesis—seems establishing itself as belonging to authentic history; those which forecast the future must at present be regarded as highly conjectural. They all are presented by our author with great distinctness, and so as to be wonderfully impressive to the imagination. From these he passes to consider the speculations on "The Unseen Universe," attributed to Professors Tait and Balfour Stewart. The substance of their hypothesis is something like this:—as the minutest change in the physical atoms of the universe produces an interminable series of effects, so the molecular disturbances of the brain which accompany thought and feeling may be propagated in their effects into the unseen, all-enveloping ether, whose existence is indicated by science; there may thus be constituted an enduring register of each man's inner life; and at the change which we call death there may be a transfer of the individual consciousness to this correlative self which has grown up *pari passu* with the earthly life, and corresponds to it somewhat as the negative plate to the photograph. The hypothesis, which in this bald statement is scarcely intelligible, appears, when fully set forth, not only very ingenious, but fertile in moral suggestion, which it would be interesting to follow out. But Mr. Fiske shows very clearly—at least to the mind of a layman in science—that it has not an

atom of genuine proof, or even the semblance of proof; and it lies in that field of material existence where a theory absolutely without proof has no standing whatever. The strictly materialistic character of the theory is pressed by Mr. Fiske as its weakness. He shows that theories of a purely spiritual existence, wholly unconditioned by matter, stand on entirely different ground. Of such an existence there can, in the very nature of things, be no scientific evidence; we who are materially conditioned have no faculties for apprehending pure unconditioned spirit in any such way as we apprehend things tangible and visible. But here comes in a most important consideration, which is strongly urged by our author: "The entire absence of testimony does not raise a negative presumption except in cases where testimony is accessible." It is this idea, which he reiterates and develops, that seems to us to constitute Mr. Fiske's most important contribution to the subject in hand. That the silence of science regarding a spiritual hereafter has absolutely no weight in negation of such an existence, is a truth too little recognized both by the devotees of science and by those who dread it. It is here that we reach the door to that class of considerations which do have legitimate weight upon the question of immortality. Into this field Mr. Fiske goes but a little way, and though he says here some very good things, he by no means makes any adequate presentation of the moral evidence for immortality. It would perhaps be too much to expect this, in addition to the valuable service rendered by his essay in showing the radical unsoundness of seductive materialistic speculations upon properly spiritual themes; in affirming in science's own behalf that there is a realm where her writs do not run; and in directing us again to the truth that "the things of the spirit are spiritually discerned."

The paper on "Athenian and American Life" is an admirable diagnosis of our great national disease, *Hurry*. We must take exception in one respect to the attractive picture of Athenian life, as deficient in its entire ignoring of the moral blemishes which left their ugly stain, not only on the history, but on the noblest literature of that remarkable people. Aside from this we suppose the picture is essentially truthful, as it certainly is vivid and pleasing; and it admirably serves its purpose of a foil to our feverish and money-worshipping society. We do not remember meeting anywhere a more philosophical account of the causes which have plunged all modern peoples, and especially our own, into this joyless, exhausting, life-sapping pursuit of material good; nor have we seen a better exposition of the various ills wrought in every department of life by this tendency. The substance of the essay needs to be repeated a thousand times to the community; its ideas should be inwrought in every one who has the shaping of other lives.

Mr. Fiske is always readable, even when he does not convince; he has a happy faculty of so using his scholarship and scientific habit of mind as to interest those who are only moderately versed in scholarship or science.

\* The Unseen World, and other Essays. By John Fiske, M.A., LL.B. Boston: James R. Osgood & Company. 1876.

**"Examples for Stump-Drawing."**

MRS. SUSAN NICHOLS CARTER principal of the Woman's Art School, Cooper Union, publishes, through L. Prang & Co. of Boston, a series of "Examples for Stump-Drawing," consisting of a cylinder vase, gourd, Lysicrates scroll, and eagle, in each six stages, and head of Homer in five stages. These are accompanied by a pamphlet giving suggestions to teachers and pupils for the practical use of the examples. There may be a better method of drawing from casts; but the artist is a good draughtsman, the directions are minute and must prove exceedingly useful to those who desire to learn the use of the stump.

**New English Books.**

LONDON, April 6.

THE traditional "oldest inhabitant" of Paternoster Row, if such a person can be found, is ready to declare that there never was a season when so little was doing in the way of publication and the bringing out of new books as in the present year, and especially at this portion of it, when general activity should be the rule, and not, as it is now, the exception. The same chronic dullness seems to have settled down over the whole book trade of Great Britain; but this state of things offers a difference in its results from a similar condition of affairs in the United States. Not being eaten up by large business expenses, and living at a moderate rate of personal expenditure, the book-seller in town or country, when nothing is doing, can afford to do nothing, and live on quietly hoping for better times, but has no occasion to fail. Owing to the absence of speculative habits, the bad debts of the publishers are next to nothing, and would be much more than covered by one per cent. on their sales. The sensation of the month just passed has undoubtedly been a book of Mr. Russell, descriptive of the Prince of Wales's tour in the East. It is in the form of a "Diary in India, with some Account of the Visits of his Royal Highness to the Courts of Greece, Egypt, Spain and Portugal," with illustrations by Sydney Hall, in royal octavo. So large a field requires a peculiar talent for its proper development. If the "pen of a ready writer" can justly be attributed to any one it must surely belong to the author of the famous letters from the Crimea; but so many places and persons all claimed to have justice done them that even Dr. W. H. Russell has been delayed in the execution of his task beyond the appointed time, so that the book—long ago announced for Christmas—only makes its appearance in March. It has nevertheless found an ample and hearty support from the public. The first edition of two thousand copies was insufficient to supply the subscription number of twenty-four hundred ordered previously to the appearance of the work, and more than another thousand of the second edition, at an advance price, are already clamored for by the trade. The illustrations by Mr. Sydney Hall are remarkable for absolute fidelity,

and the skill shown in depicting vast crowds and assemblages of people, and without indistinctness or confusion. Altogether the book is a handsome as well as a successful one, and is well worthy of preservation as the record of an event of importance to the future of the Oriental world. Though it cannot compare with the work of M. Rousselet, "India and its native Princes," in splendor of illustration, the two books together furnish the materials for a most vivid impression of India at the present day,—that teeming hive of two hundred millions of people,—a world of itself, ruled over by some four hundred and fifty distinct sovereignties, and extending from the everlasting snows of the Himalayas, to tropical Ceylon; yet all condensed and comprehended in popular usage in a single word—Hindustan.

The visit of the great explorer Dr. Schliemann to London has aroused the attention of scholars anew to the importance of his wonderful discoveries. Some of his drawings and photographs were partially exhibited at the reading of a paper by him before the Society of Antiquarians; but they will remain a sealed book until the publication of his work simultaneously in English, American, German, and French editions, next autumn. This is a very proper precaution against garbled statements, and it is Dr. Schliemann's express desire that the whole of the evidence involving the origin, attributions, destination, etc., of the remains he has discovered shall be presented to the public at once, so that the materials for confirming or assailing his conclusions should be equally within reach of all. The personal reception of Dr. Schliemann has been of a very gratifying character, though few could recognize in the short, slight, active, gentlemanly man, scarcely arrived (to all appearance) at middle age, the person who had the energy to make a fortune in the western hemisphere, and the spirit to expend it in a more than princely manner in the eastern, in the interests of science alone. As an American citizen, Dr. Schliemann claims the sympathy of his compatriots, and will doubtless meet with sufficient proofs of it in the reception given to his forthcoming "Researches at Mycenæ and Tyrius in Greece." "The Cradle of the Blue Nile, a Visit to the Court of King John of Ethiopia," by an English gentleman, E. A. de Cosson, possesses considerable interest, as it is the first connected account we have had of that country since the time when the death of King Theodore dissolved all the elements of authority and left Abyssinia in a state of the most thorough anarchy and confusion. From this chaos it has been rescued by the fortunate advent of one man, the Prince Kassa, who now reigns in the place of the late Theodore, and has reorganized the country to such effect that it has opposed a successful resistance to all the attacks of the much more powerful country—Egypt. To do justice to this monarch is the chief object of Mr. de Cosson's book, and it possesses the advantage (rare in the present day) of complete novelty of subject.

Though Scotland has done something in stone and marble in commemoration of the one subject



wherein the national enthusiasm always glows at fever heat,—the genius of Robert Burns,—there has yet been wanting the most appropriate and enduring of all monuments to a poet—a complete edition of his writings in every respect worthy of his fame. This omission is now being supplied in a most successful manner by the appearance of the "Library Edition of the Complete Works of Robert Burns," under the editorial superintendence of William Scott Douglas, who is well known to all students of the poet as having devoted his life to the subject. Notes to every poem, detailing its origin and exhaustive of its history, etc., indexes, tables, and an ample glossary are supplied by the editor, and an "Essay on the Genius of Burns" is contributed by John Nichol, LL. D., professor of English literature in Glasgow university. The edition distinctly claims to present many unedited poems, besides additional stanzas, etc., to pieces already published. The original MSS. have been collated when they exist in every instance, and many important variations are now derived from them. A large number of important unpublished letters will now first appear in print; and, in short, the entire remaining productions of Burns are now meeting with the reverend care and attention formerly confined to the works of the ancient classics; and it is the aim of the editor to produce what would have been formerly called a "*Variorum*" edition, enriched with contributions from all sources, but as the work is so thoroughly done that no gleanings should be left for a successor, the issue of the first volume will test how fully this idea has been carried out. The beauty of its mechanical execution must strike every lover of books, and it may be sufficient to say that it proceeds from the same press that has produced the recent library edition of Molière's works, in six volumes, through the energy of a publisher who bids fair to recall to Edinburgh the old glories of the days of the Constables, Ballantynes, etc., when London itself could hardly match the enterprises undertaken by the great Scotch houses. A fine line engraving by Anderson—the frontispiece of volume one—is the most trustworthy transcript of Nasmyth's famous portrait of the poet ever executed; and the other embellishments of the volume, fac-similes, etc., all show the loving care and assiduity consecrated to the illustration of the poet. Enough has been said to call the attention of book-buyers to the work, and it is certain none of them can say they are disappointed with it.

In spite of the prevailing cry of dullness of trade, of course, in a thickly settled country like England, there is a steady sale, to a considerable extent, especially of cheap and low-priced books, as some late examples show. It would seem as if the interest attaching to the Eastern question had permeated down to the lower stratum of society, for the publisher of the cheap edition of the Koran, already mentioned, has, to his own surprise, sold between forty and fifty thousand copies of it. The first cheap edition of any of Charles Dickens's works has been

issued by their legal proprietor and published, so as to fill the market in anticipation of the time when they would be open to any one by the expiration of the copyright—now, within a year or two, as regards the early writings. Of "Pickwick" and the "Sketches," accordingly, fifty thousand each were printed at fifty cents each. That number of "Pickwick" was exhausted in two or three weeks, and an equal quantity of both is now reprinting. An elegant little typographical *bijou*—a French dictionary on a new plan—has sold to the extent of ten or twelve thousand copies, though not a cheap book; and, by a rare fate, the printer (Mr. Bellows, of Gloucester), author and publisher, are combined in one person, so the right person reaps the reward. Out of London the sales of quantities like the above are confined to the north of England, and the manufacturing districts of Lancashire and Yorkshire. The agricultural south and east (except where religious dissent has stirred up men's minds a little, as in Cornwall) is as mentally torpid as in the days of the heptarchy,—a curious fact in so small a country.

The new series of "Short Studies on Great Subjects," by Mr. J. A. Froude (the historian), collects, for the first time, several of his admired papers from periodical publications, and also contains some original ones—now first published—as his interesting "Leaves from a South African Journal," a record of his experience when on a special Government Mission to arrange some disturbing questions in the colony of the Cape of Good Hope. "The Life and Correspondence of Thomas De Quincy" bids fair to prove a valuable addition to the rich English stock of literary memoirs. The editor, Mr. H. A. Page, has been intrusted with the whole of De Quincy's papers, including letters from Professor Wilson, Thomas Carlyle, etc. etc. These are given in the memoirs, and a special feature will be a medical estimate and examination of his case in connection with the consumption of opium, by Dr. Eatwell, a well-known physician. A few forthcoming books are: "Sketches of Ottoman History," by Dr. Church, Dean of St. Paul's; "Gotthold Ephraim Lessing, his Life and Works," by Miss Helen Zimmern, who lately introduced "Schopenhauer and his Philosophy" to English readers; a volume containing Lessing's chief works is also in preparation for Bohn's Standard Library, where will shortly appear the second part of Goethe's "Faust," translated by Miss Swanwick. "Lectures on Welch Philology," by John Rhys, the incumbent of the new Professorship of Celtic Language and Literature at Oxford, treats of a subject by a man of European reputation hitherto left to mere provincial hands. "Theism," by Dr. Robert Flint, Divinity Professor at the University of Edinburgh, is the new volume of the "Baird Lectures," and promises to be an important book. "The Religion of Israel, a Manual," by Dr. Knappert, of Leyden, is translated by Rev. R. A. Armstrong, and brings the results of Professor Kuenen's great work into an accessible shape in one volume 12mo.

## THE WORLD'S WORK.

## Novel Styles of Window-Screens.

By the use of strips of colored glass for the slats or leaves of blinds, in place of wood, an ingenious form of interior window-screen has been made that admits of a variety of effects. The blind may be of the usual shape, and the slips of glass, 25 millimeters (1 inch) wide and 6 millimeters thick ( $\frac{1}{4}$  inch), and of a convenient length, are pivoted at each end so that they can turn freely in every direction. Half of the slips in the blind are of one color and half are of another, and these colors are placed alternately, and all the slips of one color are joined by a rod, as in the common form of wooden blind. By this device, one half the blind can be opened and the other half closed. If green and violet glass is used, the blind will then appear green divided by black lines, or violet divided by black lines, according to the colored slips exhibited. If both the green and violet slips are half way open, the blind will give stripes of green, blue, and violet light, the blue light being obtained by the overlapping of the green and violet glass. When the slips are oblique, but at right-angles with each other, the blind will have alternate broad stripes of green and violet, and when all are open, the blind will give clear light, intersected by narrow dark lines. With red and green glass this style of blind will give all these effects in red and green, with the addition of yellow when the slips overlap each other. This style of blind is also adapted for fire screens, softening the light of the fire and tempering the heat.

## Granulated Gold in Glassware.

THE use of a fine frost-work of granulated gold imbedded in glass has been considered a lost art. The few samples of Venetian glass treated in this manner that are in existence give no intimation of the method of securing the grains of gold in the glass, and the rediscovery of the art has already attracted favorable attention. The glass vase, or other object, is first blown in the usual way, and is then covered with pure gold leaf, and is at once heated with a blow-pipe. This heat is sufficient to cause the gold to run into fine drops and globules, and is also sufficient to melt the glass slightly, so that the gold sticks to it. The vase is then covered with a thin film of clear glass, leaving the vase, when tempered, hard and smooth on the outside, and with the gold apparently bedded in the substance of the vase. The gold granulations may be laid on in any desired pattern, and in any degree of thickness, and the work is reported to be no more expensive than the slight extra labor of the blow-pipe, the extra film of glass, and the cost of the gold.

## Stenochromy.

THIS method of printing in colors differs from chromo-lithographic printing in the use of only one plate for all the colors, and in giving the colors at

one impression. The colors employed are mixed with fatty substances that give a soft pigment, having the consistency of butter at 40° Fahr. At a temperature slightly higher the pigments melt, and may be treated as liquids. They are also of a uniform character and specific gravity, and are said to be strong and durable when laid on paper.

In preparing to print, the color next the borders of the picture is first melted and is then poured into a shallow wooden tank that forms the block from which impressions are taken. Upright strips of metal are set up in the bottom of the tank to define the places where the color is to flow, and when the pigment is cold and hard the slips are removed, and the outlines of this color in the picture are carefully cut out with a thin knife held vertically in a movable frame. Slips are again set up on the uncovered places, and another liquid color is poured into the tank. In this manner all the pigments, including white, are added one after the other till the surface of the tank is covered, and every color is in its proper place. A leveling knife is passed over the work, as soon as it is cold and hard, to bring every color to a uniform surface and the color block is ready for printing. The paper is then laid on the block and gently pressed down by means of rollers passing over the back. On lifting the sheet all the colors are found in their place in one impression, and to finish the print it is treated with one or two impressions from lithographic stones to add the outlines in black and to put in any small pieces of color or blended colors that may be needed. It will be observed that in this stenochromy printing every color is on the block and all are impressed at once. The pigments, being soft, readily adhere to the paper and a succession of copies may be taken till the color is exhausted. All the impressions are alike, the last being as good as the first, even if many thousand copies are made. The pictures, when finished, are said to be permanent, strong and cheap.

## Fac-simile Copying.

A SIMPLE and inexpensive process for making fac-simile copies of letters with an ordinary copying-press is announced. The letter is first written with a very strong aniline ink and is then suffered to dry naturally without the use of a blotter. When dry, a sheet of transfer paper is dampened (as in ordinary copying) and laid over the letter and both are placed in a leather folio or "printing pad" and placed in a common press. On taking these from the press the transfer paper has a copy of the letter in reverse, and while this is still wet, writing paper is laid on it and the two are again submitted to the press. This gives a fac-simile of the letter and a number of copies may be taken from the transfer paper in the same way till the copies become faint. To take more copies the transfer may be restored by dampening the back of the transfer paper, or by

taking a second, or even third, transfer from the original letter. This process recommends itself for simplicity and cheapness, and seems likely to prove as useful as the ordinary copying press.

#### Preservation of Iron.

PROFESSOR BARFF offers the suggestion that iron may be protected from rust and the action of corrosive vapors by covering it with its own magnetic or black oxide. This oxide gives the iron an exceedingly hard, black surface, and adheres so tenaciously that even if a spot is left bare and the ordinary oxidation begins it will not spread on the surface, as is often the case with paints. The method employed to produce this oxide is to expose the iron to the action of the superheated steam under a high temperature, when a film of black oxide is formed, varying in thickness and hardness, according to the temperature and the time of exposure. At a temperature of 500° Fahr. for five hours, a surface is obtained that will resist a moderate exposure to the weather. A temperature of 1,200° Fahr. for seven hours will give a hard, black surface that will resist a file, and will bear unlimited exposure to the atmosphere out of doors without rusting. So far, only small articles have been coated with the oxide, and new and larger appliances are being prepared to test the value of Barff's discovery when applied to girders and bridge iron.

#### New Process in Making Steel.

A NEW process for making a high quality of tool-steel has been under experiment for some time, and its manufacture upon a commercial scale is now announced. A highly magnetic ore is selected and crushed in a Blake machine. The crushed ore is sifted, and the coarser part is put into a disintegrator and reduced still finer, and in this way a fine iron-ore sand is produced. The sand is then passed through a self-acting magnetic separating machine, in which the iron is extracted by means of magnets. This pure, rich, metallic powder is mixed with powdered charcoal and resin, and after being warmed, is made up into blocks in a common brick machine. The carbonaceous matter is intended to combine with the oxygen of the ore, and thus effect its reduction, and the proportion used is somewhat in excess of the oxygen to be removed. These bricks are then placed in a gas retort having tight doors at each end, and then submitted to a full red heat for twenty-four hours. By this time gas ceases to flow, and the carbonaceous matter having been burned out, the ore is reduced to a red hot powder. The next step is to remove this and to allow it to cool down, without coming in contact with the air. To accomplish this common gas is turned into the retort at the discharging end to produce an outward pressure and exclude the air, and at the same time an iron receiver is pushed up closely to the discharging end of the retort. Gas is then turned into the feeding end of the retort, and the door is opened sufficiently to admit the entrance of tools to push the hot powdered iron out of the retort into the receiver.

It is there kept closed from the air till it is cold. It is then passed once more through the disintegrator and magnetic separator to select the iron from the ash and refuse mingled with it. The pure metallic powder thus obtained is then mixed with resin and with manganese, or any other alloy, and pressed into cakes, is put into crucibles and melted in the ordinary manner employed in making crucible steel. This steel is reported to give highly satisfactory results in point of toughness and endurance.

#### Memoranda.

IN selecting corn for seed, it is often the practice to merely choose large ears from the general crop. It is suggested that this is not the best method, for, while the plant may be strong and vigorous and bear large ears, the corn may have been fertilized by pollen from feeble or stunted plants near it, and the seed may retain and repeat these adverse qualities in spite of the vigor of the plant on which it grew. It is said that a better plan would be to plant some of the seed in a small plot by itself, at a distance from the main crop, and to give this patch plenty of room and high culture. When the tassels appear in this seed-bed every plant should be examined, and all feeble stalks should be pulled out or cut off below the tassel before it has an opportunity to bloom. By this arrangement both the plant on which the ears grow, and the pollen scattered from its own and neighboring tassels, will be alike strong and vigorous, and the seed will partake of the strength of both its parents.

*Les Mondes* reports a new method of cleaning wool by means of gas. The wool is placed in a receiver made air-tight, and is treated with a current of air at a temperature of about 40° Fahr. This is followed by a current of dry, cool hydrochloric acid gas that quickly decomposes any vegetable matter clinging to the wool. After this a stream of pure air is turned through the receiver to drive out the acid gas and the receiver is raised to a temperature of 130° Fahr. to finish the destruction of the vegetable refuse. To remove all traces of the hydrochloric gas, ammoniacal vapor is then driven through the wool, and the work is finished. The process is said to leave the wool perfectly clean and unharmed.

The beautiful iridiated glass so much admired in the Cesnola and other collections has been successfully imitated, and promises soon to appear upon a commercial scale. The process consists in submitting common glass to the action of water charged with 15 per cent. of hydrochloric acid at a pressure of two atmospheres, and at a temperature of 248° Fahr. for about seven hours. The interest shown in the hardened glass (the La Bastie glass already described in this department) has resulted in a new hard glass, obtained by submitting fluid glass to heavy hydraulic pressure. No other tempering is required, and the pressed glass is reported to be even stronger than the La Bastie glass, and to show a fibrous instead of a crystalline fracture when broken.

## BRIC-À-BRAC.



A PRECAUTIONARY MEASURE.

"Say, Boss! will ye jes lock dat coat up and give me check for him while I heave in dat coal o' yours? 'Pears like as if dey's so many thieves 'bout now 'days nothin' haint safe."

## Love and Reason.

BY ROSA VERTNER JEFFREY.

YOUNG Love went sailing without fear  
Upon a lotus leaf,  
Though Reason said, "Pray let me steer,  
Or you will come to grief."  
Then laughed the saucy god and cried,  
"You look too grum and blue,  
Go walk along the river's side,  
I'll paddle my own canoe."

So Reason, plodding on the shore,  
Watched Love's frail shallop floating,  
And thought,—"Though walking is a bore,  
It's very risky boating."  
Hallo! young imp, you will be wrecked,  
Your bark is very frail."  
But Love sang gayly, "I expect  
To have a jolly sail!"

"Keep off the rocks and cataracts,  
They oft beguile a stranger."  
Quoth Love—"A truce to stupid facts!  
I rather like the danger."  
The stream is smooth, the sky is clear,  
You need not come to measure  
The crystal deeps through which I steer,  
My pilot shall be Pleasure!"

On with the tide did Cupid drift,  
His hand at Reason kissing,  
To where those sun-lit waters swift—  
Swift down the rocks went hissing:  
A warning scorned, a danger spurned,  
Of which he saw no token;  
Love's lotus leaf was overturned,  
His fairy rudder broken;

The gossamer sail was torn to strings;  
He seized on Pleasure, crying,  
"Come, let us rise! Though drenched my  
wings,  
They're light enough for flying.  
From yonder bark—to ruin whirled—  
We shall escape in season.  
I'll fly with Pleasure through the world,  
And leave my wrecks to Reason."

## The War of the Roses.

IN Celia's cheek the red rose and the white,  
So fairly mingle, we must deem it best,  
That both should conquer in the equal fight,  
And as they mingle put all strife at rest;  
For blushes as they come seem half ashamed,  
And paleness steals, from 'neath the radiant  
glow,

Till, like carnations in the drifted snow,  
Which is the brightest none can ever know.  
Ah! had she lived five hundred years ago,  
Sweet trace had ne'er been broken, treason  
blamed,

Nor York, nor Lancaster had struck a blow,  
But both in homage bowed, both been content,  
Upon so fair a queen, to see their colors blent.  
R. T. W. DUKE, JR.



JEALOUSY.



A CORNER IN APPLES

## To a Gorilla in a Menagerie.

"O MIGHTY ape!  
Half beast, half man,  
Thy uncouth shape  
Betrays a plan

The gulf of Being at a bound to span.  
Thou art the link between ourselves and brutes,  
Lifting the lower to a higher plane;  
Thy human face all cavers refutes,  
Who sneer at Darwin as a dreamer vain.  
How camest thou beneath this canvas tent?  
Within this cage? behind these iron bars?  
Thou, whose young days in tropic lands were spent,

With strange companions, under foreign stars?  
Art thou not lonely? what is life to thee  
Thus mewed in prison, innocent of crime,  
Become a spectacle for crowds to see,  
And reckless boys to jeer at all the time?  
Hast thou no feelings such as we possess?  
Art thou devoid of any sense of shame?  
Rise up, O brother, and thy wrongs redress;  
Rise in thy might, and be no longer tame!"

I paused in my apostrophe; the animal arose;  
He seized the bars that penned him in; my blood  
in terror froze;  
He shook the cage from side to side; the fright-  
ened people fled;  
Then in a tone of savage wrath the horrid mon-  
ster said:

"I'm hired by the wake to wear the dhirty cray-  
thur's shkin;  
I come from Tipperary, and me name is Micky  
Flynn."

F. W. CLARKE.

## Compensation.

THIS large and flabby man, with the big voice,  
Adroit to wheedle and fawn in public life,  
Reveals, in private hours, the frequent choice  
Of bullying his frail sallow little wife.

But she, in turn, feeling his rude words gall,  
Stabbed cruelly by his hard imperious sneer,  
Striving her best on scantiest wherewithal  
To filliest serve the meager household cheer,

Will sometimes, her meek patience overthrown,  
Assail in petulant and querulous way,  
Her maid-of-all-work, wearied to the bone,—  
A pale gaunt drudge who toils for trivial pay.

These taunts the ill-used factotum calmly bears,  
Yet vents her dudgeon later in fierce jeers  
Hurled at a timorous kitchen-maid down-stairs,—  
A shabby little waif with monstrous ears.

Then she, this injured scullion, goes to seek  
An old lame cur that in the back-yard dwells,  
And having found him, with malicious tweak  
She pulls his stumpy tail until he yells.

The poor cur, thus maltreated without cause,  
Hobbles away in dismal spleen at that,  
And watches for an hour, with sullen jaws,  
Beside a certain hole where dwells a rat!

HUGH HOWARD.